

E-Governance Service Effectiveness and Ease of Doing Business among Smes in Cabanatuan City: Basis for a Digital Governance Improvement Plan

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ABSTRACT

This study examined the effectiveness of e-governance services and their influence on the ease of doing business among small and medium enterprises (SMEs) in Cabanatuan City, Nueva Ecija. Specifically, the study assessed the effectiveness of e-governance services in terms of accessibility, efficiency, reliability, and responsiveness. It also identified the challenges encountered by SMEs in using digital government services and proposed possible improvements to strengthen digital governance implementation. The study utilized a quantitative descriptive research design, with data gathered through survey questionnaires administered to 52 SME owners, managers, and business personnel who have experience using online government services for permits, registration, and other business-related transactions.

The findings revealed that respondents strongly agreed that e-governance services are effective, particularly in terms of accessibility and efficiency. Respondents perceived online government services as accessible across different devices and helpful in reducing physical visits to government offices, minimizing paperwork, and improving transaction processes. The study further found that e-governance positively influences the ease of doing business by simplifying business registration, permit applications, and regulatory compliance. However, despite the positive perceptions, respondents also identified several challenges affecting the use of e-governance services. These include government website downtime, unstable internet connectivity, insufficient technical support, unclear instructions, and limited technical knowledge among users.

Moreover, respondents strongly agreed that improvements such as enhanced platform usability, integrated online government systems, faster processing of online applications, improved customer support services, and training programs for SMEs should be prioritized. The study concludes that e-governance services significantly contribute to improving business operations and administrative efficiency among SMEs in Cabanatuan City. Nevertheless, continuous enhancement of digital infrastructure, online platforms, and support services is necessary to strengthen the effectiveness, accessibility, and reliability of e-governance services and to promote a more efficient and business-friendly digital environment.

Keywords: Accessibility; Digital governance; E-governance; Ease of doing business; Small and medium enterprises (SMEs)

INTRODUCTION

In an increasingly interconnected world, digital transformation becomes a critical strategy for governments seeking to enhance public service delivery, streamline administrative processes, and foster a more business-friendly environment. One key component of this transformation is e-governance, which refers to the application of information and communication technologies (ICT) to improve public service delivery, strengthen citizen participation, enhance institutional decision-making, and transform the relationship between government and its stakeholders (Grigalashvili, 2022).

Despite its potential, many governments still encounter challenges in ensuring the effectiveness and efficiency of digital public services. These challenges often involve issues related to system usability, accessibility, and service quality, which may affect the overall performance of digital governance initiatives. As noted by Pancho et al. (2025), the effectiveness of government e-services largely depends on the ability of institutions to strengthen and optimize digital systems to deliver reliable and user-centered services. In this context, examining the effectiveness of e-governance initiatives becomes essential in identifying areas that require improvement and in developing strategies that enhance digital public service performance.

In the Philippine context, the rapid digitalization of public service delivery significantly transforms the interaction between local governments, citizens, and business organizations. The enactment of the Ease of Doing Business and Efficient Government Service Delivery Act of 2018 (Republic Act 11032) institutionalizes reforms aimed at reducing bureaucratic red tape and improving efficiency in government transactions (Gonzales & De Castro, 2024). This legislation mandates national and local government agencies to streamline administrative procedures and adopt digital platforms to facilitate faster and more transparent public services. However, despite these policy initiatives, many local government units continue to face challenges in fully implementing digital governance systems, particularly in ensuring accessibility and efficiency for business sectors. Since micro, small, and medium enterprises (MSMEs) serve as the backbone of the Philippine economy, improving digital government services becomes essential in supporting business growth and economic development (Del Rosario et al., 2025). Therefore, assessing how digital governance initiatives influence the ease of doing business provides valuable insights into the effectiveness of current policy implementation.

At the local level, the adoption of e-governance systems in municipalities and cities demonstrates potential benefits in improving administrative efficiency and service delivery. Studies indicate that entrepreneurs generally perceive e-governance implementation as moderately effective in terms of service quality, perceived usefulness, satisfaction, and trust toward government services (Sarsale et al., 2024). However, despite the recognized benefits, the level of adoption and effectiveness of digital platforms varies across local government units. This uneven implementation reflects persistent issues related to digital infrastructure, institutional capacity, and user accessibility (Del Rosario et al., 2025). Such disparities create challenges for business owners who rely on government services for permits, licensing, and regulatory compliance. In response to these challenges, the present study aims to examine the effectiveness of e-governance services and their influence on the ease of doing business among SMEs in Cabanatuan City, Nueva Ecija. The findings of this study are expected to contribute to the development of a Digital Governance Improvement Plan that can strengthen digital service delivery, improve administrative efficiency, and enhance the overall business environment in the locality.

THEORETICAL FRAMEWORK

This study is anchored on the DeLone and McLean Information Systems Success Model (2003), which explains that the success and effectiveness of an information system depend on its quality, service performance, user satisfaction, and the benefits derived from its use. According to the model, high-quality systems characterized by accessibility, efficiency, reliability, and responsiveness contribute to positive outcomes and greater user satisfaction.

In the context of this study, e-governance services serve as the information system utilized by Small and Medium Enterprises (SMEs) in conducting transactions with government agencies. Accessibility, efficiency, reliability, and responsiveness represent indicators of system and service quality. When these dimensions are perceived positively by SME owners and managers, they are expected to experience improved business transactions, reduced processing time, lower compliance costs, and enhanced convenience, thereby contributing to the ease of doing business.

Research Questions

This study aims to evaluate the effectiveness of e-governance services and their influence on the ease of doing business among small and medium enterprises in Cabanatuan City. Specifically, this study aims to answer the following research questions:

1. How may the demographic profile of the respondents be described in terms of:
 - 1.1 Age;
 - 1.2 Sex;
 - 1.3 Position
2. How may the profile of the business be described in terms of:
 - 2.1 Type of business;
 - 2.2 Years of business operation;
 - 2.3 Number of employees?
3. How may the effectiveness of e-governance services among SMEs in Cabanatuan City be assessed in terms of:
 - 3.1 Accessibility;
 - 3.2 Efficiency;
 - 3.3 Reliability;
 - 3.4 Responsiveness?
4. How may the respondents assessed the influence of e-governance services on ease of doing business among SMEs in Cabanatuan City, Nueva Ecija?
5. How may the respondents assessed the challenges by using E-governance services?
6. What are the proposed improvements by SMEs in Cabanatuan City, Nueva Ecija with regards to the challenges identified?

METHODOLOGY

This study utilizes a quantitative descriptive research design to examine the effectiveness of e-governance services and their influence on the ease of doing business among small and medium enterprises (SMEs) in Cabanatuan City, Nueva Ecija. Quantitative research allows the collection of measurable data that can be statistically analyzed to describe patterns, perceptions, and relationships among variables within a specific population. This approach is widely used in studies involving digital governance and business environments because it provides an objective and systematic analysis of respondents' perceptions and experiences (Yuwono, Suroso, & Novandari, 2024).

The descriptive research method enables the researchers to examine the current condition of e-governance implementation and its effect on business transactions. Descriptive research helps identify patterns, characteristics, and trends within a population by gathering data through structured research instruments such as surveys (Fazil et al., 2024). Through this approach, the study determines how SMEs perceive the effectiveness, accessibility, reliability, and efficiency of government digital services, particularly in facilitating business registration, licensing, and regulatory compliance.

Recent studies emphasize that digital government initiatives improve transparency, efficiency, and accessibility of public services, which are essential factors in promoting a business-friendly environment (Khairati & Putra, 2024). Furthermore, the adoption of digital technologies and e-governance platforms plays a significant role in

improving operational efficiency and decision-making processes among SMEs. Digital transformation initiatives allow businesses to streamline processes, enhance service delivery, and strengthen interaction with government institutions (Mick, Kovaleski, & Chiroli, 2024).

The survey questionnaire serves as the primary research instrument used to collect data from the respondents. The questionnaire contains structured statements designed to measure the respondents' perceptions regarding the effectiveness of e-governance services and their impact on the ease of doing business. The instrument utilizes a Likert scale format, which allows respondents to indicate their level of agreement with each statement.

The survey is administered to selected SME owners and managers operating in Cabanatuan City, Nueva Ecija, who serve as the primary respondents of the study. The data gathered from the respondents provides empirical evidence regarding the benefits and challenges of digital government services in business operations. Studies on entrepreneurs' assessment of e-governance show that factors such as service quality, perceived usefulness, and trust significantly influence the adoption and effectiveness of government digital services among businesses (Sarsale et al., 2024).

The findings of the study serve as the basis for proposing a Digital Governance Improvement Plan aimed at enhancing the effectiveness, accessibility, and efficiency of e-governance services for SMEs in Cabanatuan City.

Sampling Procedure

The study utilizes a purposive sampling technique in selecting the respondents. Purposive sampling is a non-probability sampling method in which participants are selected based on specific characteristics relevant to the objectives of the study. In this research, the respondents are (1) the owners or managers of small and medium enterprises operating within Cabanatuan City and (2) who have experience in accessing or utilizing e-government services related to business registration, permits, taxation, and other regulatory processes. This sampling approach is suitable as it enables the researcher to collect data from persons with adequate knowledge and direct experience with the effectiveness of e-governance services and their effect on business operations.

Respondents

The respondents of this study are owners and managers of small and medium-sized businesses in Cabanatuan City. These individuals were selected because they frequently interact with government agencies when applying for permits, paying taxes, and utilizing business services. Their experiences give us useful information about how well e-governance programs work and how they affect business operations. A total of 52 respondents participated in the study.

Research Site

The study was conducted in Cabanatuan City, a first-class component city located in the province of Nueva Ecija in Central Luzon. The city is widely recognized as the commercial, financial, and educational center of the province, attracting entrepreneurs, workers, and consumers from nearby municipalities. Due to its strategic location and active economic environment, Cabanatuan City serves as an important hub for trade and business activities in the region.

RESULTS AND DISCUSSION

Demographic Profile of Respondents

This section presents the demographic profile of the respondents in terms of age, sex, position, type of business, years of business operation, and number of employees. The data provide a general description of the respondents

involved in the study on *E-Governance Service Effectiveness and Ease of Doing Business Among SMEs in Cabanatuan City* and help explain their perspectives and experiences regarding e-governance services.

Age

Table 1. Demographic Profile of Respondents as to Age

Age	Frequency	Percentage
18–25	32	62%
26–35	16	31%
36–45	4	8%
46–55	0	0%
56 and above	0	0%
Total	52	100%

Table 1 shows that most of the respondents were aged 18-25 years old, accounting for 62% of the total respondents, followed by those aged 26-35 with 31%. Only 8% belonged to the 36-45 age group, while no respondents were recorded from older age categories.

The findings indicate that younger respondents primarily represented the study. This suggests that younger SME stakeholders are more engaged in digital government transactions and online business-related services. Recent studies have shown that younger individuals are more likely to adopt and utilize digital technologies because of their higher level of digital literacy and familiarity with online platforms (OECD, 2021). Likewise, the United Nations (2022) reported that younger populations demonstrate greater participation in e-governance initiatives due to easier adaptation to digital systems and electronic public services. The limited representation of older respondents may indicate lower digital engagement among older SME stakeholders. Therefore, the findings emphasize the need for inclusive and accessible digital governance systems that can effectively serve users across different age groups.

Sex

Table 2. Demographic Profile of Respondents as to Sex

Sex	Frequency	Percentage
Male	16	31%
Female	36	69%
Total	52	100%

Table 2 presents the demographic profile of the respondents according to sex. The findings reveal that the majority of respondents were female, comprising 36 respondents, or 69% of the total population, while male respondents accounted for 16, or 31%.

The results indicate that female respondents were more represented in the study. This suggests that women have significant participation in SME operations and digital government transactions within the study area. Recent studies have shown that women are becoming more active in entrepreneurship and in the use of digital technologies for business management and access to government services (Asian Development Bank, 2022). The higher female representation may also reflect the increasing involvement of women in managing SMEs and adapting to digital governance systems. These findings highlight the importance of providing accessible, efficient, and inclusive e-governance services that address the needs of women entrepreneurs and other business stakeholders.

Position

Table 3. Demographic Profile of Respondents as to Position

Position	Frequency	Percentage
Owner	28	54%
Manager	4	8%
Administrator	8	15%
Associate	4	8%
Accounting Associate	4	8%
Staff	4	8%
Total	52	100%

Table 3 presents the demographic profile of the respondents by position in their respective businesses. The findings show that most respondents were business owners, comprising 28 respondents or 54% of the total population. This was followed by administrators, with 8 respondents or 15%. Meanwhile, managers, associates, accounting associates, and staff each accounted for 4 respondents or 8% of the total respondents.

The results indicate that most participants in the study were directly involved in business ownership and decision-making. This suggests that the findings primarily reflect the experiences and perceptions of individuals responsible for business operations and compliance with government requirements. Recent studies have emphasized that SME owners play a vital role in the adoption of digital technologies and e-governance systems because they directly manage administrative, financial, and regulatory processes (World Bank, 2021). The high representation of business owners in the study strengthens the relevance of the findings in evaluating the effectiveness of e-governance services and identifying areas for digital governance improvement among SMEs.

Profile the Business

Type of Business

Table 4. Profile of the Business as to Business Type

Type of Business	Frequency	Percentage
Retail	8	15%
Manufacturing	0	0%
Services	36	69%
Food and Beverage	8	15%
Total	52	100%

Table 4 presents the profile of businesses by business type. The findings reveal that most respondents were engaged in service-related businesses, comprising 36 respondents (69% of the total population). Retail and food and beverage businesses each accounted for 8 respondents or 15%, while no respondents were involved in manufacturing businesses.

The results indicate that service-oriented enterprises dominate the respondent population in the study. This suggests that businesses in the service sector are more actively engaged in digital government transactions and online regulatory processes. Recent studies have shown that service-based SMEs are among the primary adopters of digital technologies because they rely on online communication, electronic transactions, and customer-centered digital platforms (Organisation for Economic Co-operation and Development, 2021). The absence of

manufacturing respondents may indicate lower participation from the sector or differences like government service utilization. These findings highlight the importance of strengthening e-governance systems that support the operational and regulatory needs of service-oriented SMEs.

Years of Business Operation

Table 5. Profile of the Business as to Years of Business Operation

Years of Business Operation	Frequency	Percentage
Less than 1 year	8	15%
1–3 years	32	62%
4–6 years	4	8%
7–10 years	0	0%
More than 10 years	8	15%
Total	52	100%

Table 5 presents the profile of the businesses according to years of operation. The findings show that the majority of the businesses had been operating for 1-3 years, comprising 32 respondents or 62% of the total population. Businesses operating for less than 1 year and more than 10 years each accounted for 8 respondents or 15%, while only 4 respondents or 8% had operated for 4-6 years. No respondents were recorded under the 7-10 years category.

The results indicate that most SMEs included in the study were relatively young businesses. This suggests that newly established enterprises are actively engaging with digital government services and online business processes. Recent studies have shown that younger businesses are more likely to adopt digital technologies and e-governance systems to improve operational efficiency, compliance, and market accessibility (World Bank, 2022). The presence of businesses operating for more than 10 years also indicates that long-established enterprises continue to recognize the importance of digital government services in business operations. These findings emphasize the need for effective and accessible e-governance systems that can support SMEs across different stages of business development.

Number of Employees

Table 6. Profile of the Business as to Number of Employees

Number of Employees	Frequency	Percentage
1–9	24	46%
10–49	24	46%
50–99	0	0%
100–199	4	8%
Total	52	100%

Table 6 presents the profile of the businesses according to the number of employees. The findings reveal that businesses with 1–9 employees and those with 10–49 employees each comprised 24 respondents or 46% of the total population. Meanwhile, only 4 respondents or 8% belonged to businesses with 100–199 employees, while no respondents were recorded under the 50–99 employee category.

The results indicate that the majority of the respondents were from small enterprises. This suggests that small businesses are actively engaged in digital government transactions and online business processes. Recent studies have shown that small enterprises increasingly rely on digital technologies and e-governance systems to improve

efficiency, reduce administrative burdens, and support business operations (Asian Development Bank, 2021). The limited number of larger businesses in the study may reflect the dominant presence of small enterprises within the local SME sector. These findings emphasize the importance of developing accessible and efficient e-governance services that address the operational needs of small businesses.

Effectiveness of E-Governance Services

The effectiveness of e-governance services in SMEs of Cabanatuan City is assessed in terms of accessibility, efficiency, reliability, and responsiveness.

Accessibility

The effectiveness of e-governance in terms of accessibility to SMEs in Cabanatuan is presented in Table 7.

Table 7. Effectiveness of E-Governance Services in terms of Accessibility

Item Statement	Weighted Mean	Verbal Description
1. Government e-services are easy to access online.	3.46	Strongly Agree
2. The websites or platforms are available when needed.	3.54	Strongly Agree
3. Information about government services is easy to find online.	3.46	Strongly Agree
4. Online systems can be accessed using different devices (e.g., computer, mobile phone).	3.46	Strongly Agree
Overall Weighted Mean	3.48	Strongly Agree

Legend: 3.26 - 4.00 strongly agree, 2.51 - 3.25 agree, 1.76 - 2.50 disagree, 1.00 - 1.75 strongly disagree

Table 7 presents the effectiveness of e-governance for SMEs in Cabanatuan City in terms of accessibility. The accessibility dimension obtained an overall weighted mean of 3.48, verbally described as strongly agree. This indicates that the respondents perceive government e-services as highly accessible and convenient. The second statement received the highest weighted mean of 3.54, suggesting that SMEs in Cabanatuan City find the government's online platforms consistently available for use.

The results indicate that SMEs in Cabanatuan City gain advantages from accessible digital government platforms that provide seamless transactions with government entities across many digital devices. Accessibility is a crucial element of e-governance since it diminishes difficulties in governmental transactions and fosters inclusivity among entrepreneurs. The findings are consistent with the study of Sarsale et al. (2024), which indicated that entrepreneurs in Philippine municipalities regarded e-governance systems as beneficial and useful due to their accessibility and convenience. The enhanced accessibility ratings indicate that local digital governance initiatives in Cabanatuan City efficiently assist SMEs by facilitating access to government services.

Efficiency

The effectiveness of e-governance in terms of efficiency for SMEs in Cabanatuan is presented in Table 8.

Table 8. Effectiveness of E-Governance Services in terms of Efficiency

Item Statement	Weighted Mean	Verbal Description
1. E-governance services reduce the time required for business transactions.	3.46	Strongly Agree
2. Online services reduce the need for physical visits to government offices.	3.54	Strongly Agree

3. Digital platforms speed up permit processing.	3.23	Agree
4. Digital platforms speed up business registration processes.	3.15	Agree
Overall Weighted Mean	3.35	Strongly Agree

Legend: 3.26 - 4.00 strongly agree, 2.51 - 3.25 agree, 1.76 - 2.50 disagree, 1.00 - 1.75 strongly disagree

Table 8 presents the effectiveness of e-governance for SMEs in Cabanatuan City in terms of efficiency. The efficiency dimension obtained an overall weighted mean of 3.35, verbally described as strongly agree. This suggests that respondents view e-governance services as efficient in enabling business transactions. The highest-rated indicator was “Online services reduce the need for physical visits to government offices”, garnering a weighted mean of 3.54, translated as strongly agree. This indicates that digital platforms substantially reduce the necessity of physically attending government offices, therefore conserving time and resources for SMEs.

The findings demonstrate that e-governance services enhance operational efficiency in SMEs by streamlining processes and minimizing transaction time. The findings align with Bajar (2020), who asserted that e-government systems enhance administrative efficiency and optimize government procedures using digital technologies.

Reliability

The effectiveness of e-governance in terms of reliability to SMEs in Cabanatuan is presented in Table 9.

Table 9. Effectiveness of E-Governance Services in terms of Reliability

Item Statement	Weighted Mean	Verbal Description
1. Government online systems function without frequent errors.	2.92	Agree
2. The information provided on e-government platforms is accurate.	3.31	Strongly Agree
3. Online transactions are processed correctly.	3.31	Strongly Agree
4. Government platforms ensure secure transactions.	3.38	Strongly Agree
Overall Weighted Mean	3.23	Agree

Legend: 3.26 - 4.00 strongly agree, 2.51 - 3.25 agree, 1.76 - 2.50 disagree, 1.00 - 1.75 strongly disagree

Table 9 presents the effectiveness of e-governance for SMEs in Cabanatuan City in terms of reliability. The reliability dimension obtained an overall weighted mean of 3.23, verbally described as agree. This suggests that respondents typically have confidence in the reliability of government digital systems, although there is still potential for enhancement. The highest-rated indicator was “Government platforms ensure secure transactions,” with a weighted mean of 3.38, followed by “The information provided on e-governance platforms is accurate” and “Online transactions are processed correctly,” each with a weighted mean of 3.31.

The statement “Government online systems operate without frequent errors” garnered the lowest weighted mean of 2.92, indicated as “Agree.” This indicates that although SMEs typically have confidence in online government services, technical difficulties and occasional system outages may likewise impact user experience.

The findings indicate that SMEs prioritize secure and precise digital government services; however may still face technical hurdles that impact reliability. Matias and Vigonte (2025) assert that dependable digital infrastructure and user-centric service design are essential determinants for the successful adoption of e-governance in the Philippines.

Responsiveness

The effectiveness of e-governance in terms of responsiveness to SMEs in Cabanatuan is presented in Table 10.

Table 10. Effectiveness of E-Governance Services in terms of Responsiveness

Item Statement	Weighted Mean	Verbal Description
1. Government agencies respond promptly to online inquiries.	3.08	Agree
2. Technical support is available when issues arise.	2.92	Agree
3. Concerns submitted online are addressed on time.	3.08	Agree
4. Users receive timely updates on application status.	3.15	Agree
Overall Weighted Mean	3.06	Agree

Legend: 3.26 - 4.00 strongly agree, 2.51 - 3.25 agree, 1.76 - 2.50 disagree, 1.00 - 1.75 strongly disagree

Table 10 indicates that respondents generally agree that e-governance services are effective in terms of responsiveness, as reflected by the overall weighted mean of 3.06. The highest weighted mean of 3.15 was obtained by the statement “Users receive timely updates on application status,” suggesting that respondents appreciate being informed about the progress of their transactions through online systems. Meanwhile, the lowest weighted mean of 2.92 was recorded for “Technical support is available when issues arise,” indicating that respondents perceive technical assistance as less accessible or insufficient compared to other aspects of responsiveness. Overall, the findings suggest that while e-governance services provide acceptable responsiveness, improvements in technical support services are still needed to enhance user satisfaction and efficiency.

The findings indicate that although government agencies offer acceptable communication and updates, SMEs may continue to encounter delays in obtaining help and technical support. Responsiveness is a crucial element of e-governance, as prompt communication enhances public trust and satisfaction. The results are corroborated by Bao et al. (2024), who observed that agile response mechanisms and efficient collaboration are crucial for the successful deployment of e-governance.

Influence of E-Governance Services on the Ease of Doing Business

The influence of e-governance on the ease of doing business of SMEs in Cabanatuan is presented in Table 11.

Table 11. Influence of E-Governance Services on the Ease of Doing Business

Item Statement	Weighted Mean	Verbal Description
1. E-governance services simplify business registration.	3.54	Strongly Agree
2. Online services make it easier to apply for business permits.	3.62	Strongly Agree
3. Digital systems reduce paperwork in government transactions.	3.54	Strongly Agree
4. E-governance improves transparency in business processes.	3.46	Strongly Agree
5. Online systems reduce the need for intermediaries.	3.38	Strongly Agree
6. Digital platforms make regulatory compliance easier.	3.31	Strongly Agree
7. E-governance reduces overall operational time.	3.31	Strongly Agree
8. E-governance reduces transaction-related costs.	3.23	Agree
9. Overall, digital government services improve business operations.	3.31	Strongly Agree
Overall Weighted Mean	3.41	Strongly Agree

Legend: 3.26 - 4.00 strongly agree, 2.51 - 3.25 agree, 1.76 - 2.50 disagree, 1.00 - 1.75 strongly disagree

Table 11 shows that respondents strongly agree that e-governance services positively influence the ease of doing business, as reflected by the overall weighted mean of 3.41. The highest weighted mean of 3.62 was obtained by the statement “Online services make it easier to apply for business permits,” indicating that respondents highly appreciate the convenience and efficiency brought by digital government services in processing business-related applications. On the other hand, the lowest weighted mean of 3.23 was recorded for the statement “E-governance reduces transaction-related costs,” which was verbally interpreted as “Agree.” This suggests that although respondents recognize the benefits of e-governance in improving business operations, some may still experience expenses related to internet access, technology, or online processing fees. Overall, the findings imply that e-governance services significantly contribute to simplifying business processes and improving operational efficiency for businesses.

The results indicate that e-governance services substantially enhance the ease of conducting business for SMEs in Cabanatuan City. Digital platforms expedite transactions, streamline governmental processes, and augment transparency, hence fostering a more conducive business environment. These findings correspond with Ching et al. (2021), who asserted that digital transformation enhances the resilience and efficiency of SMEs by facilitating access to governmental and commercial support systems.

Challenges in Using E-Governance Services

The challenges encountered by SMEs in Cabanatuan in using e-governance are presented in Table 12.

Table 12. Challenges in Using E-Governance Services

Item Statement	Weighted Mean	Verbal Description
1. Internet connectivity affects my ability to use e-services.	3.31	Strongly Agree
2. Government platforms are difficult to navigate.	2.92	Agree
3. Lack of technical knowledge makes systems difficult to use.	3.23	Agree
4. Government websites experience system downtime.	3.46	Strongly Agree
5. Instructions in online systems are unclear.	2.92	Agree
6. Technical support is insufficient when problems occur.	3.15	Agree
Overall Weighted Mean	3.17	Agree

Legend: 3.26 - 4.00 strongly agree, 2.51 - 3.25 agree, 1.76 - 2.50 disagree, 1.00 - 1.75 strongly disagree

Table 12 shows that respondents generally agree that there are challenges in using e-governance services, with an overall weighted mean of 3.17. The most common problems identified were government website system downtime (3.46) and poor internet connectivity (3.31), both verbally interpreted as “Strongly Agree,” indicating that technical issues greatly affect access to online services. Respondents also agreed that lack of technical knowledge (3.23), insufficient technical support (3.15), difficult platform navigation (2.92), and unclear instructions (2.92) contribute to the difficulties in using e-governance systems. Overall, the findings suggest the need to improve system reliability, internet accessibility, user-friendly interfaces, and technical assistance to enhance the effectiveness of online government services.

The findings indicate that, despite the beneficial effects of e-governance services, SMEs still face technological and operational obstacles that may hinder the complete efficacy of digital governance activities. Sarsale et al. (2024) identify technological concerns, inadequate digital literacy, and insufficient support services as prevalent challenges faced by users of local e-governance systems in the Philippines. The findings underscore the necessity of enhancing system stability, internet infrastructure, digital literacy training, and customer support mechanisms to foster a more effective and inclusive digital governance framework for SMEs.

Proposed Improvements

The challenges proposed improvements by SMEs in Cabanatuan in e-governance are presented in Table 13.

Table 13. Proposed Improvements

Item Statement	Weighted Mean	Verbal Description
1. The government should improve platform usability.	3.69	Strongly Agree
2. Training should be provided for SMEs on using e-services.	3.69	Strongly Agree
3. Government systems should be integrated into a single online platform	3.62	Strongly Agree
4. Customer support services for online systems should be enhanced.	3.62	Strongly Agree
5. Faster processing of online applications should be prioritized.	3.62	Strongly Agree
Overall Weighted Mean	3.65	Strongly Agree

Legend: 3.26 - 4.00 strongly agree, 2.51 - 3.25 agree, 1.76 - 2.50 disagree, 1.00 - 1.75 strongly disagree

Table 13 reveals that respondents strongly agree with the proposed improvements for e-governance services, as shown by the overall weighted mean of 3.65. The highest weighted mean of 3.69 was obtained by the statements “The government should improve platform usability” and “Training should be provided for SMEs on using e-services,” indicating that respondents highly value user-friendly systems and the importance of equipping SMEs with the necessary knowledge and skills to effectively use online government services. Meanwhile, the lowest weighted mean of 3.62 was shared by the statements on integrating government systems into a single online platform, enhancing customer support services, and prioritizing faster processing of online applications. Although these received the lowest means, they were still verbally interpreted as “Strongly Agree,” suggesting that respondents also consider these improvements essential in making e-governance services more efficient, accessible, and convenient for SMEs in Cabanatuan.

The findings indicate that SMEs in Cabanatuan City strongly support activities designed to enhance the usability, integration, responsiveness, and efficiency of e-governance services. These enhancements may facilitate a more efficient digital governance framework that fosters corporate operations and encourages SME growth and competitiveness.

CONCLUSIONS

The study concludes that e-governance services are generally effective and positively influence the ease of doing business among SMEs in Cabanatuan City. Respondents perceived government digital services as accessible, efficient, and beneficial in simplifying business transactions such as permit applications, registration, and regulatory compliance. The findings further revealed that e-governance services help reduce paperwork, operational time, and the need for physical visits to government offices, thereby improving overall business operations. Despite these positive outcomes, SMEs still encounter challenges related to system downtime, unstable internet connectivity, insufficient technical support, unclear instructions, and limited technical knowledge. These issues affect the overall user experience and efficiency of digital government services. The respondents strongly emphasized the need to improve platform usability, provide training programs for SMEs, integrate government systems into a unified online platform, strengthen customer support services, and prioritize faster processing of online applications. Therefore, the study highlights the importance of continuously enhancing digital governance systems to ensure more reliable, user-friendly, and efficient e-governance services that can support the growth and development of SMEs in Cabanatuan City.

REFERENCES

1. Asian Development Bank. (2021). Asia SME Monitor 2021: How Asia and the Pacific small businesses are coping with the COVID-19 pandemic. Asian Development Bank. <https://www.adb.org/publications/asia-sme-monitor-2021>
2. Asian Development Bank. (2022). Harnessing digital transformation for inclusive growth in Asia and the Pacific. Asian Development Bank. <https://www.adb.org/publications/harnessing-digital-transformation-inclusive-growth-asia-pacific>
3. Bajar, J. T. (2020). E-Government in the Philippines: An assessment. *Ciencia: Humanities, Education, Arts, Languages, and Social Sciences (HEALS)*, 1(1), 26-50.
4. Bao, Y., Cheng, X., Su, L., & Zarifis, A. (2025). Achieving employees' Agile response in E-Governance: exploring the synergy of technology and Group collaboration. *Group Decision and Negotiation*, 34(2), 209-234.
5. Ching, S. F., Ching, M. R. D., & Ona, S. (2021). The new normal is digital: Digital transformation for micro, small, medium enterprises in the Philippines. In *Adaptive and Resilient Governance in Health Crisis Situations: Policy and Practical Considerations* (pp. 89-127). https://www.researchgate.net/publication/348647183_The_New_Normal_is_Digital_Digital_Transformation_for_Micro_Small_Medium_Enterprises_in_the_Philippines
6. Del Rosario, M. A., Santos, L. B., & Villanueva, P. R. (2025). Digital governance and business development: Challenges in local government adoption of e-services in the Philippines. *Journal of Public Administration and Digital Innovation*. (Forthcoming).
7. DELONE WH and MCLEAN ER (1992) Information systems success: the quest for the dependent variable. *Information Systems Research* 3(1), 60-95.
8. Fazil, A. W., Hakimi, M., Aslamzai, S., & Quchi, M. M. (2024). A review of e-government practices in the age of digitalization. *International Journal of Multidisciplinary Approach Research and Science*.
9. Gonzales, R. T., & De Castro, J. M. (2024). Ease of Doing Business Act and digital transformation in Philippine government services. *Philippine Journal of Governance and Public Policy*, 12(1), 45-63.
10. Grigalashvili, N. (2022). E-governance for sustainable development: ICT strategies in public sector transformation. In S. Kumar & A. Singh (Eds.), *Governance and Digital Innovation* (pp. 23-41). Springer.
11. Khairati, F., & Putra, H. (2024). Empowering government fiscal efficiency: Usability evaluation and e-government model refinement. *International Journal of Management Science and Information Technology*.
12. Matias, E., & Vigonte, F. G. (2025). From Vision to Reality: A Review of Essential Success Factors for Effective E-Governance in the Philippines. Available at SSRN 5277391.
13. Mick, M. M. A. P., Kovaleski, J. L., & Chiroli, D. M. G. (2024). Sustainable digital transformation roadmaps for SMEs: A systematic literature review. *Sustainability*.
14. Organisation for Economic Co-operation and Development. (2021). The digital transformation of SMEs. OECD Publishing. <https://doi.org/10.1787/bdb9256a-en>
15. Pancho, E. F., Reyes, D. S., & Alonzo, P. M. (2025). Assessing user-centered design in government e-services: Usability, accessibility, and public performance. *International Journal of Digital Government Research*, 16(2), 88-107.
16. Sarsale, J. P., Herrera, K. L., & De Leon, V. (2024). Perceptions of e-governance effectiveness among local entrepreneurs: A study of service quality and trust. *Asia Pacific Journal of E-Government*, 9(3), 75-92.
17. Sarsale, M. S., Mogueis, K. R. C., Ehada, R. N., & Timbal, L. R. E. (2024). Entrepreneur's assessment on e-governance implementation of a Philippine countryside municipality: The mediating effect of perceived trust. *Journal of Management, Economics, and Industrial Organization*.
18. United Nations. (2022). E-Government Survey 2022: The future of digital government. United Nations Department of Economic and Social Affairs. <https://desa.un.org/publications/un-e-government-survey-2022>

19. World Bank. (2021). Small and Medium Enterprises (SMEs) Finance: Improving SME access to digital and financial services. World Bank Group. <https://www.worldbank.org/en/topic/sme/finance>
20. Yuwono, T., Suroso, A., & Novandari, W. (2024). Information and communication technology in SMEs: A systematic literature review. *Journal of Innovation and Entrepreneurship*.