

Public Readiness and Satisfaction Analysis Toward a Strategic E-Tracs Online Payment Rollout in the Masbate City Treasury Office

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Abstract

This study evaluated the relationship between public readiness and user satisfaction regarding the eTRACS Online Payment Facility at the Masbate City Treasury Office. Utilizing a descriptive-correlational research design, data were gathered from active taxpayers and clients. Respondents were predominantly highly educated and represented diverse economic classes. User readiness was assessed through technology optimism, innovativeness, discomfort, and insecurity, while satisfaction was measured via system, information, and service quality, alongside net benefits. The findings revealed high levels of technology optimism (4.55) and innovativeness (4.27), with users strongly favoring electronic applications over traditional face-to-face methods. Conversely, moderate levels of anxiety persisted regarding transaction reversals and system performance. Satisfaction ratings were exceptionally high, particularly regarding net benefits (4.47), such as reduced wait times and travel costs. A statistically significant, strong positive correlation ($r = 0.684$, $p < 0.01$) was established between user readiness and satisfaction. Consequently, the study concludes that fostering digital confidence directly enhances system satisfaction. Recommendations include upgrading local technological infrastructure, establishing dedicated helpdesks and transparent refund protocols to alleviate user anxieties, simplifying interface designs, and conducting localized information campaigns to bridge the digital literacy gap within the community.

Keywords: eTRACS (Enhanced Tax Revenue Assessment and Collection System), Technology Readiness, User Satisfaction, Online Payment Facility, Public Financial Management

1. Introduction

Digital technology has quickly advanced and altered how public services are delivered across the globe. Electronic governance systems have been embraced by many government providers (government agencies and local government units) for their effectiveness, transparency, accountability, and ability to better deliver services to their constituents. Many of these initiatives are supported by the Ease of Doing Business Act (Republic Act No. 11032). According to the EDBA, the government must simplify its procedures, use Information and Communications Technology when providing services, and improve the delivery of services to the public. The Anti-Red Tape Authority has also issued a Memo Circular (No. 2020-004) that promotes online transactions and electronic credit card payment facilities to enhance public convenience by eliminating the need for citizens to physically visit government agencies while conducting government transactions. Additionally, the Department of Information and Communications Technology (DICT) has and continues to promote digital governance via its eLGU program which facilitates seamless integration of both systems, by creating a seamless interface between LGUs' electronic governance systems and tax revenue collection. The increasing requirement for faster, safer and more easily accessed local government services has led to the strengthening of the trend towards electronic payments in local government transactions. The Commission on Audit Circular No. 2013-007, issued by the government in 2013, provides guidelines on how to accept electronic payments and issue electronic official receipts for government transactions. The COVID-19 pandemic accelerated the establishment of online payment systems at many LGUs which allowed them to continue providing services with less physical contact, according to Orijola (2024). There was a rise in the use of online payment systems for real estate taxes within local government units in 2023 due to the increase in public demand for access to cashless/online transactions. However, limited digital literacy, slow Internet access, and low public recognition of digital systems, according to the study conducted by Orijola (2024), remain barriers for many users of these services. Siar (2007) has also indicated that while technology has enhanced governance and improved service delivery, local governments in the Philippines continue to experience difficulties related to technological infrastructure and implementation capacity. As an integral part of E-Government, digital payment methods provide a more efficient and comfortable means for citizens to interact with their government. The use of electronic payment methods shortens processing time, reduces the requirement for personal visits, as well as creating an environment where financial transactions are more transparent. According to Raon et al. (2020), Trust, convenience, security and perceived usefulness impact the adoption of electronic payment systems in the Philippines. The research conducted by Olan and Briones (2022) further illustrates that individual users' acceptance of online payment systems relies heavily on ease of use, accessibility and reliability of the system that facilitates

them. Canares (2016) notes that e-taxation in local governments results in increased transparency and accountability in public financial management. Overall, this suggests that the success of digital payment systems depends upon public trust as well as user experience in addition to the availability of technology. Public readiness and satisfaction are essential for determining the efficiency of online government systems. Parasuraman's Technology Readiness framework illustrates the variations in optimism, innovativeness, discomfort, and insecurity that people have when using technology. Citizens that exhibit both technology optimism and innovativeness will be more likely to adopt a new digital system than those experiencing both technological discomfort and insecurity about; privacy and security of data and/or operations involving a new system. Research conducted on the adoption of e-government has identified that the system quality, information quality, and service quality of an e-Government system can influence user satisfaction as well as the continued intention to use e-Government (Alshehri et al. 2012). In the Philippines, it has been noted by Mabaga et al. (2025) that perceived usefulness of e-payment systems by users of government e-payments impacts their willingness to adopt them; therefore, when users have the perception that e-payment systems are helpful and visually efficient, they would be more inclined to adopt them. Masbate City Treasury Office is implementing the Electronic Treasury and Revenue Assessment Collection System (eTRACS) with the aim of creating an online payment system to modernize local treasury operations, improve delivery of public services and streamline the overall process for taxpayers and business owners who use the eTRACS system to pay taxes and other obligations via electronic means. The eTRACS system offers taxpayers and business owners the ability to pay their taxes and obligations electronically without the hassle of going to a government office for multiple visits and/or waiting in long lines. However, the ability of the eTRACS system to achieve its desired outcomes depends largely on the readiness and satisfaction of the individuals using the system. There may be differences based on age, educational level, type of business and level of technological literacy that will impact how people view and use the system. Therefore, this study investigates the level of readiness and satisfaction of eTRACS users within the City of Masbate and explores whether or not there is a significant relationship between the two variables. The findings from this research provides the Masbate City Treasury Office with information about the best possible means to develop an effective strategy to increase the acceptance, efficiency and engagement of citizens who use digital treasury services through the eTRACS system.

2. Material and methods

2.1 Research Design

The study utilized a quantitative research framework, focusing on collecting and analyzing numerical data to assess variables objectively. With this framework, researchers turned the assessments of public readiness, satisfaction, and online payment adoption into quantifiable measures so that the researcher could examine objectively how well-prepared community members were to use local government services and how well local governments provide their services to their communities. The research was conducted using a quantitative research design described as Descriptive-Correlational. This design has been selected to investigate not just the current condition, features, and occurrence of public readiness attributes, but also the level of satisfaction among the citizens of Masbate City, and the relationship between public readiness and citizen satisfaction without the intent of controlling the environment. This study's inclusion of correlational analysis allows for more than a basic description; instead, it allows the researcher to identify how and how strongly public readiness and citizen satisfaction relate to each other so that a complete and descriptive analysis of the local digital government transition can be determined.

2.2 Locale of the Study

This study took place in the City of Masbate of Masbate City, the capital of the Provincial Government of Masbate, located geographically in the central region of the Philippine Archipelago as one of the only islands linking the Islands of The Visayas (a group of islands to the south) and the mainland of Luzon (the main geographical area and largest island of the country). City of Masbate has been referred to as the "Rodeo Capital" (famed for Rodeo events) of the Philippines due to its prime location, excellent management of its businesses, and collection of revenue by the local government throughout the years. The City Treasury Office of Masbate City (located in the City Hall), which holds responsibility for administering and processing all financial transactions that are generated in relation to the local government unit (by way of assessing and collecting real property taxes, issuing business permits and other locally assessed fees). The selected site is relevant because this office serves as the primary implementing agency for the Enhanced Tax Revenue Assessment and Collection System (eTRACS), which is part of the City Treasury Office's desire to use modernized processes and the National Government's intention to move to digitize many transactions currently being processed manually. The shift from traditional to digital e-governance in the City of Masbate was a different area to examine technology readiness than other cities with regard to earlier forms of urban development. Although City of Masbate has developed urban areas, the municipality still faces many of the same common challenges faced by provincial islands, including inconsistent and/or poor internet access and diverse levels of digital literacy among all taxpayers who live in and around the city. By selecting this specific area for the research, the researcher was able to obtain the true user experience of individuals who are affected by the movement toward online payment options (e.g., paying taxes online) in this particular province. The geographical

and socio-economic characteristics of City of Masbate provide a perfect environment to assess how local government innovation (using technology) meets the needs of the public in terms of readiness and satisfaction.

2.3 Respondents of the Study

This study investigated taxpayers and users of services in Masbate City through a purposively sample of 30 respondents. The sample consist of the primary clients of the Masbate City Treasury Office, who are direct users of the planned E-TRACS online payment platform. The researcher used purposeful sampling to help answer the study's research questions by ensuring that participants were only those who transacted with the local treasury office and provided the necessary baseline characteristics needed for an evaluation of digital payment systems. Consequently, the study will only utilize individuals who possess the appropriate operational experiences with, and the personal characteristics necessary to transact with, the local treasury office on a regular basis to provide valuable information about public readiness for and levels of satisfaction with, the deployment of electronic payments.

2.4 Sample and Sampling Procedure

The study utilized a purposive sampling technique, a non-probability sampling design chosen to deliberately select participants based on specific criteria that align directly with the research objectives. The sample size consisted of exactly 30 respondents ($N = 30$) who were selected based on three explicit inclusion criteria: they must be active taxpayers or business clients registered with the Masbate City Treasury Office, they must handle their financial transactions directly, and they must be the intended primary users or early adopters of the Enhanced Tax Revenue Assessment and Collection System (eTRACS) online payment facility. By filtering out casual observers and focusing strictly on these 30 purposively selected individuals, the researcher ensured that the data were gathered from a highly relevant, qualified group possessing the necessary baseline digital literacy and localized operational experiences. This focused sample size provided the high-quality, specific data required to effectively calculate the central descriptive measures and execute the Pearson correlation coefficient (r) to determine the baseline relationship between public readiness and user satisfaction.

2.5 Research Instrument

The primary research instrument for this study is a structured, researcher-made Survey Questionnaire that has been tailored to address the study objectives. The instrument gathers quantitative data that can be analyzed systematically to document the readiness capabilities of the public and their expected or actual satisfaction with the system. This survey questionnaire is organized into three distinct parts, so that the responses flow logically from the personal profile of the subject to specific evaluations of the primary variables. In order to ensure the quality and reliability of the survey instrument, the instrument was validated by experts in the areas of Public Administration, Information Technology and Research Methodology prior to being administered in the sample. The questionnaire was reviewed by a panel of experts in each of these fields to establish content validity (i.e. whether the survey items accurately measure the intended variable) and confirmed that the items will provide reliable data with which to evaluate overall readiness and satisfaction levels for citizens using state provided services. The feedback provided by these experts was used to revise the wording, technical accuracy and structural configuration of the survey to ensure meaningful responses from the subjects. The instrument's sections consist of demographic information and transactional data in the first section, a five-point Likert scale that measures the public's readiness of the E-TRACS system within all of its technical and accessibility areas in the second section and a five-point Likert scale that measures the satisfaction with the treasury office services and the digital platform rollout as well as the transactional service areas related to convenience and service delivery in the third section. Through the use of a weighted mean measure, the researcher can quantify how well the variables are being exhibited in a real-world civic context.

2.6 Data Gathering Procedure

The researcher followed a systematic and ethically grounded process in collecting data for the study, executing the procedure in several phases that included the preparation of materials, the formal seeking of administrative permission, the orientation of respondents, and the actual administration of the validated instruments. Throughout the process, the researcher coordinated closely with local treasury personnel and school administrators where applicable to ensure the smooth conduct of all research activities and to minimize disruption to regular office hours. First, the researcher sought approval to conduct the study by writing a formal request to the administrative offices of the Masbate City Treasury Office. Once granted, an orientation was held with the participating taxpayers and service users to explain the purpose of the study, the significance of their honest assessment, and the protocols for completing the multi-part survey questionnaire. Ethical considerations, including the guarantee of anonymity and the voluntary nature of their participation, were emphasized during this session to build rapport and ensure the integrity of the data. Upon approval and orientation, the researcher distributed the three-part Survey Questionnaire along with the Data Privacy Agreement forms to the 30 purposively selected respondents. The researcher remained available to clarify any technical terms or instructions within the instrument, particularly concerning the five-point Likert scales for readiness and satisfaction outcomes. Respondents were given ample time to reflect on their transactional experiences before returning the completed forms. After the collection of the instruments, the data were organized and tabulated for statistical analysis. The researcher ensured that the data management process strictly followed the protocols outlined in the Data Privacy Act of 2012, keeping all physical and digital copies of

the responses in a secure location. No names or specific identifiers were included in any part of the analysis or final reporting, and participants were informed of their right to withdraw from the study at any time without any consequences.

2.7 Data Analysis Techniques

To analyze and interpret the data collected from the 30 members of the general public, both descriptive and inferential statistics were employed to summarize the demographic characteristics, transactional traits, and the linear relationship between public readiness (independent variable, X) and user satisfaction (dependent variable, Y) toward the eTRACS online payment rollout. Frequency and percentage distributions were used to summarize raw response counts and percentage forms using the formula $P = \frac{f}{N} \times 100$, where P represents the percentage, f is the frequency, N is the total number of respondents (30), and 100 serves as the constant multiplier. The weighted mean was utilized as the central descriptive measure to gauge general perceptions of readiness and satisfaction levels, calculated via the formula $WM = \frac{\sum(f \times x)}{N}$, where WM is the weighted mean, $\sum$ is the summation, f is the frequency, x is the numerical weight of each response, and N is the total number of respondents (30). Following these calculations, rankings were hierarchically applied from high to low across all responses to pinpoint the strongest and weakest indicators of readiness, guiding the strategic improvement plan based on a 5-point Likert Scale verbal interpretation: 4.21–5.00 (Strongly Agree), 3.41–4.20 (Agree), 2.61–3.40 (Neutral), 1.81–2.60 (Disagree), and 1.00–1.80 (Strongly Disagree). Finally, the Pearson correlation coefficient (r) was applied as the inferential statistical tool to determine the level of association and direction of the linear relationship between the variables, expressed through the formula $r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$ where r is the correlation coefficient, X represents public readiness scores, Y represents public satisfaction scores, N is the total number of respondents (30), and $\sum$ denotes the summation of the designated values.

2.8 Ethical Considerations

The data collection process was anchored on strict ethical standards to protect the rights, safety, and privacy of all participants. Prior to the administration of the validated instruments, formal administrative clearance was secured from the Masbate City Treasury Office. Participation in the study was entirely voluntary, and an orientation session was conducted to ensure informed consent; during this session, respondents were explicitly informed of their right to refuse participation or withdraw from the study at any point without facing any administrative or personal consequences. To ensure absolute anonymity and confidentiality, no personal identifiers, names, or specific business addresses were recorded or included in any stage of the data tabulation or final reporting. All collected survey instruments and associated Data Privacy Agreement forms were handled, processed, and stored in a secure physical and digital location accessible only to the researcher, fully complying with the statutory mandates of the Philippine Data Privacy Act of 2012 (Republic Act No. 10173).

3. Results and Discussion

3.1 Demographic Profile of Respondents

3.1.1 Age

Most respondents' ages fall within the younger and middle-aged demographic. 47% of respondents are aged 31 to 40 years and 40% are aged 20 to 30 years. The two combined (40 and under) make up a total of 87%, with older groups being only 3% for ages 41 to 50, and 10% for ages 51 and older.

3.1.2 Sex

A relatively equal distribution of users between females and males, with females slightly more than males at 53% (16 respondents) and 47% (14 respondents) respectively.

3.1.3 Highest Educational Attainment

The educational level of most survey participants is very high. In fact, there are only a handful of participants who have only completed high school, while the majority (77%) have completed their college education (23). Approximately 7% of the sample has completed their elementary education and only 16% are considered to have obtained a master's degree. A lack of participation in these two categories as well as vocational training indicates that the significant majority of all survey participants (93%) have received post-secondary or higher education.

3.1.4 Industry Type

The different commercial sectors that have adopted this system, with a total of three major sectors (Retail/Merchandising; Food & Beverage (i.e., restaurants, cafes); Other) accounting for each category's distribution rate of 27% (8 respondents per category). The Service sector (i.e., salons, repair shops, professional firms) falls in line with 16% of the total (5 respondents) while Manufacturing/Construction accounts for 3%.

3.1.5 Number of Employees

Small business research defines a significant number of businesses of micro size based on survey results. 86% of businesses surveyed employed between 1 - 9 staff members; 10% employed small businesses (10-99); only 3% were medium and 3% were large.

3.1.6 Monthly Gross Sales

The largest group of business owners is in the baseline bracket of "₱10,000 - ₱20,000" at 27%, and the second largest group is in the "₱21,000 - ₱30,000" at 23%. On the other hand, the most robust segment of top-tier businesses (those making "Above ₱150,000") represents only 13% of the sample; while all other segments are distributed between these two amounts as mid-tier income earners.

3.2 Level of User Readiness for the E-TRACS Online Payment Facility

3.2.1 Technology Optimism

Technology Optimism: Users have a high level of optimism, and positive anticipation regarding the use of digital financial infrastructure, with their overall weighted mean on this dimension (4.55) reflecting a qualitative evaluation of "Agree." Furthermore, the most significant assessment of optimism surrounding the use of digital finance in local communities was that the system enables users to easily manage their financial obligations, with a particularly high average (4.63) among local users.

3.2.2 Technology Innovativeness

The performance measure for this dimension produced an overall weighted average of 4.27 ("Strongly Agree"), indicating that local users maintain a strongly positive attitude towards adopting innovative government-to-business (G2B) applications, with previous users expressing a strong preference for electronic applications compared to traditional face-to-face forms.

3.2.3 Technology Discomfort

The performance measure for this dimension produced an overall weighted mean of 2.94 ("Neutral"), indicating that users do not feel overwhelmed or anxious about the system (because this measure is designed to identify a negative trait, a lower mean is a positive finding). Nevertheless, members do have performance expectations in regards to the technology and have a high level of frustration ("I feel frustrated when the system doesn't work as I expect") within this dimension.

3.2.4 Technology Insecurity

The overall weighted mean for this dimension was 3.10 ("Neutral") when evaluating users' concerns regarding their personal privacy and financial risk. Users tend to be cautious about the way digital finance transactions will be conducted from a perspective of safety. The primary concern was regarding their identification, where the item "I am concerned that if I make a mistake I may not be able to get my money back" had the highest score (3.27), demonstrating the level of anxiety related to reversibility of transactions.

3.3 Level of User Satisfaction

3.3.1 Quality of the System

eTRACS platform provides great operational quality and an average level of satisfaction at 4.36. Users strongly agreed that the portal was easy to use and was easy to navigate (4.40) and responded quickly to requests (4.33).

3.3.2 Information Quality

The overall weighted mean score on this dimension, measuring readability, accuracy, and completeness, was rated 4.33 ("Strongly Agree"). This indicates the portal is a very reliable means for the distribution of tax and bill data; with the currency of the data and the system's timeline being tied for the top score at 4.37 each.

3.3.3 Service Quality

Assessing the human factor and the support provided by Treasury Employees, the overall weighted mean score for Service Quality was 4.33 ("Strongly Agree"). This indicates that the staff provides a level of technical efficiency to the system as indicated by the staff's exceptional score of 4.43 for responsiveness and courtesy.

3.3.4 Net Benefits

The last measure of Satisfaction Index measures the tangible benefits that eTRAC provides; this measure produced the highest average score of 4.47 ("Strongly Agree"). This indicates that there are very tangible financial and operational benefits when using the eTRAC system. Reducing wait times at the Treasury Office (4.53), and reducing travel costs associated with use of eTRAC (4.53).

3.4 Connection Between User Readiness And User Satisfaction

The correlational analyses found that there was a statistically significant, positive connection between the independent and dependent variables with a moderate-to-strong Pearson's r correlation of 0.684 ($p < 0.01$). The correlation indicated that

individuals who were more optimistic and innovative with technology reported consistently greater satisfaction levels across all system quality, information processing, and net benefits areas. In addition, higher levels of optimism about locating fiscal reporting aligned highly with maximum levels of satisfaction about reducing travel costs and physical lines for queuing.

4. Conclusion & Recommendations

In conclusion, this study demonstrates that the eTRACS Online Payment Facility at the Masbate City Treasury Office holds immense potential for successful full-scale implementation due to a digitally literate, highly educated local taxpaying public showing high levels of technology optimism and innovativeness. Users express strong satisfaction with the system's ability to deliver tangible net benefits, such as reducing queuing times and physical travel expenses, and they highly value the responsiveness of the treasury staff. However, despite this positive reception and a strong, statistically significant correlation ($r = 0.684$, $p < 0.01$) showing that higher technological readiness directly drives greater system satisfaction, critical barriers remain. These are primarily manifested as underlying user anxieties regarding technical system performance, potential transactional errors, and the perceived irreversibility of digital payments.

To address these findings, several strategic actions are recommended to enhance local public financial management and bridge existing operational gaps. Local chief executives, city administrators, and treasury heads should allocate financial resources to upgrade municipal technological infrastructure focusing on server stability and redundant wireless connectivity while updating policy frameworks to align fully with the Ease of Doing Business Act by eliminating redundant manual steps. Additionally, the treasury office must establish immediate user assistance mechanisms, such as dedicated helpdesks, physical kiosks, or support hotlines, and deploy transparent refund and correction protocols to mitigate users' financial anxiety. IT developers should design simplified, jargon-free navigation paths tailored to provincial users, while public information officers and business licensing heads should execute targeted information campaigns, localized user guidebooks, and public-private consultations with local chambers of commerce to foster community trust and compliance.

Crucially, the interpretation of these outcomes must be considered within the specific limitations of this study. The primary constraint is the small sample size of exactly 30 respondents ($N = 30$), which was selected via non-probability purposive sampling from active clients of the Masbate City Treasury Office; consequently, the findings may not represent the digital readiness or behavior of the entire population of taxpayers or more remote rural communities within the wider province. Furthermore, because the data collection relied heavily on self-reported survey questionnaires, the responses reflect subjective snapshot perceptions at a single point in time, which are susceptible to individual biases and do not account for external, shifting macroeconomic factors. Lastly, the study focused narrowly on the initial rollout phase of the eTRACS platform, meaning that long-term tax compliance trends, the systemic impacts of mobile-centric payment alternatives, and the evolving technical stability of municipal servers over time fell outside the analytical scope of this research.

Compliance with ethical standards

This study was conducted in strict compliance with international, national, and institutional ethical standards governing human subject research, particularly adhering to the statutory mandates of the Philippine Data Privacy Act of 2012 (Republic Act No. 10173). Formal administrative clearance and ethical approval were secured from the Masbate City Treasury Office prior to data collection, ensuring that all procedures aligned with local institutional guidelines. Participation in the study was entirely voluntary, and comprehensive orientation sessions were held to secure informed consent from all 30 respondents, who were explicitly informed of their absolute right to refuse participation or withdraw from the study at any point without administrative penalty or negative consequences. To ensure the utmost confidentiality and anonymity of information, all physical and digital survey instruments and Data Privacy Agreement forms were securely processed and stored in an isolated location accessible only to the researcher, with all names, business names, and specific identifiers omitted from data tabulation and final reporting. The author affirms complete responsibility for the integrity, authenticity, and accuracy of the analyzed data and the final narrative, declaring no personal, financial, academic, or professional conflicts of interest that could influence the study's outcomes. Sincere acknowledgment is extended to the panel of experts in Public Administration, Information Technology, and Research Methodology who validated the research instruments, as well as to the cooperative staff of the Masbate City Treasury Office and the participating taxpayers whose contributions were vital to the completion of this work. Finally, the author retains sole copyright ownership of this research paper, certifying that it represents an original work with all references, citations, and structural formatting meticulously preserved to prevent any breach of intellectual property or academic integrity standards.

REFERENCES

- Philippines. (2018). *Republic Act No. 11032: Ease of Doing Business and Efficient Government Service Delivery Act of 2018*.
- Anti-Red Tape Authority. (2020). *ARTA Memorandum Circular No. 2020-004*.
- Alshehri, M., Drew, S., Alhussain, T., & Alghamdi, R. (2012). *The effects of website quality on adoption of e-government service: An empirical study applying UTAUT model using SEM*. arXiv. <https://arxiv.org/abs/1211.2410>
- Canares, M. P. (2016). Creating the enabling environment for more transparent and better-resourced local governments: A case of e-taxation in the Philippines. *Information Technology for Development*, 22(sup1), 121–138. <https://doi.org/10.1080/02681102.2015.1121857>
- Commission on Audit. (2013). *Commission on Audit Circular No. 2013-007*.
- Department of Information and Communications Technology. (n.d.). *eLGU systems guidelines and digital government initiatives*.
- Mabaga, M. J., Baligat, A., Pentecostes, M., & Villamor, K. J. (2025). Click to pay: Understanding e-payment adoption in government transactions through perceived usefulness. *Psychology and Education: A Multidisciplinary Journal*, 48(5), 799–806. <https://doi.org/10.70838/pemj.480508>
- Olan, C. J., & Briones, J. (2022). Determinants in adopting online payments of individual payors in a branch of a Philippine social insurance institution. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4287371>
- Orijola, P. J. E. (2024). *Implementation of real property tax online payments on selected local government units*. *NTRC Tax Research Journal*, 36(3), 1–16.
- Raon, C. J. B., De Leon, M. V., & Dui, R. (2020). Adoption of e-payment systems in the Philippines. *Jurnal ILMU KOMUNIKASI*, 18(1), 37–52. <https://doi.org/10.24002/jik.v18i1.3197>
- Siar, S. V. (2007). E-governance at the local government level in the Philippines: An assessment of city government websites. *Philippine Journal of Development*, 32(2), 135–159. <https://doi.org/10.62986/pjd2005.32.2d>