

A Document and Narrative Analysis of Digital Governance, Public Transportation Modernization, and Media Literacy in the Philippines: Implications for Societal Transformation

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Abstract

This study examined how digital governance, public transportation modernization, and media literacy were framed in Philippine policy documents and public discourse, and how their intersections shaped societal transformation. A qualitative research approach was used. The study employed document analysis and narrative analysis of government policies, legislative materials, institutional reports, academic literature, and public discourse sources published mainly from 2018 to 2026. The analysis was guided by Socio-Technical Systems Theory, which viewed technological, institutional, infrastructural, and civic systems as interconnected. Findings showed that digital governance was framed mainly as a tool for service efficiency, transparency, interoperability, and digital inclusion, but its participatory dimension remained limited. Public transportation modernization was framed through competing narratives of sustainable mobility and service improvement on one hand, and economic burden, livelihood risk, and contested reform on the other. Media literacy was positioned as a response to misinformation, digital citizenship, and civic participation, but its institutionalization remained fragmented. Across the three domains, access, trust, participation, information quality, and policy coordination emerged as common concerns. Citizen engagement served as the mediating mechanism that linked these domains to societal transformation. The study concluded that digital and infrastructural reforms cannot produce inclusive transformation by themselves. They must be supported by media literacy, social protection, institutional trust, and meaningful public participation. An integrated socio-technical approach is recommended to strengthen inclusive, participatory, and sustainable societal transformation in the Philippines.

Keywords: Digital Governance, Public Transportation Modernization, Media Literacy, Citizen Engagement, Socio-Technical Systems, Societal Transformation, Philippines

1. Introduction

1.1 Background

The Philippines has entered a period of rapid socio-technical change in which digital governance, public transportation modernization, and media literacy have become major areas of national development. These domains are connected to how citizens access services, move within communities, interpret public information, and participate in democratic processes. Digital governance has been strengthened through the Philippine E-Government Masterplan 2022, which promotes “One Digitized Government,” interoperable systems, citizen-centered online services, transparency, and administrative efficiency. This shows that digital transformation involves not only automation but also institutional coordination, data governance, citizen access, and public trust. However, digital reform may also deepen exclusion when internet access, digital skills, and institutional readiness remain uneven. This concern is consistent with studies that frame digital government as a process requiring institutional change, citizen engagement, and service redesign rather than simple technology adoption (Mergel et al., 2019; Tangi et al., 2021).

Public transportation modernization has also become a visible and contested reform area in the Philippines. The Public Utility Vehicle Modernization Program seeks to improve road-based transport through fleet modernization, route rationalization, industry consolidation, and local public transport route planning. Its policy logic is linked to safer, more efficient, and more environmentally sustainable mobility systems. However, it has raised concerns among drivers, operators, commuters, and transport groups because of possible displacement, affordability issues, financing burdens, and limited participation in decision-making. Thus, transport modernization is not only a technical reform. It is also a social justice issue because its benefits and costs are experienced unequally across sectors.

Media literacy has likewise become essential because public life is increasingly shaped by digital platforms, social media, and online information flows. In the Philippines, misinformation and disinformation affect public understanding of policies, institutions, elections, education, and social issues. Official advisories from the Department of Education show that false information online has required repeated public correction. Recent legislative discussions have also emphasized the need to strengthen media and information literacy so that citizens can evaluate information critically and participate responsibly in public discourse. Media literacy is therefore a civic capacity that supports informed citizenship, public accountability, and democratic participation.

Although these three domains are often treated separately, they are closely connected in practice. Digital governance shapes how policies are communicated and implemented. Transportation modernization affects access, mobility, livelihood, and public trust. Media literacy influences how citizens interpret policy narratives and respond to reforms. When these areas remain fragmented, citizen engagement and policy coherence may be weakened. Therefore, an integrated analysis is needed to examine how governance systems, mobility reforms, information environments, and citizen participation interact in the Philippine context.

1.2 Rationale and Significance of the Study

This study is justified by the need to understand societal transformation as an interconnected process. Reforms in digital public services, transportation modernization, and media literacy have created opportunities, but they have also exposed persistent gaps in access, participation, trust, and inclusion. Digital platforms may improve service delivery, but their value is limited when citizens lack connectivity or digital competence. Transportation modernization may improve safety and sustainability, but it may also create exclusion when affected groups are not meaningfully consulted or supported. Media literacy may strengthen civic awareness, but its impact remains limited when it is not embedded in education, governance, and public communication systems.

The study is significant because it offers a cross-sectoral view of reform. For policymakers, it can support more coherent policy design, stronger citizen engagement, and more inclusive implementation. For academic scholarship, it advances a socio-technical reading of Philippine societal transformation by examining the intersections among institutional systems, infrastructure systems, and cognitive systems. It also contributes

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methodologically by combining document analysis and narrative analysis to examine both policy content and public narratives. At the societal level, the study places citizens at the center of transformation. Development should be assessed not only through digital platforms, modern vehicles, or policy documents, but also through inclusion, access, participation, and public capacity to engage with information.

1.3 Theoretical Framework

This study is anchored on Socio-Technical Systems Theory. The theory explains that technological systems and social systems are mutually dependent. Technologies do not operate in isolation. They are shaped by institutions, policies, users, social practices, economic conditions, and cultural meanings. In the same way, social change is influenced by the technologies and infrastructures that organize public life. Recent socio-technical scholarship emphasizes that successful transitions require alignment among technological innovation, institutional arrangements, user practices, and broader socio-political conditions (Geels, 2019).

In this study, digital governance is treated as an institutional and technological system. It includes government platforms, online services, data systems, and mechanisms for public engagement. Public transportation modernization is treated as an infrastructure and mobility system. It includes vehicles, routes, financing systems, regulations, operators, commuters, and public space. Media literacy is treated as a cognitive and civic system. It includes the ability of citizens to access, evaluate, interpret, and use information responsibly.

The theory is suitable because the study does not examine technology as a neutral tool. It examines how technology interacts with institutions and citizens. Digital governance may improve service delivery, but its effect depends on access, trust, usability, and participation. Transport modernization may improve mobility, but its social outcome depends on affordability, consultation, livelihood protection, and equitable implementation. Media literacy may reduce vulnerability to misinformation, but its effectiveness depends on education systems, platform accountability, and public communication practices.

Citizen engagement serves as the linking mechanism in this theoretical framing. It connects institutional systems, mobility systems, and information systems. When citizens are informed, digitally capable, and meaningfully included, reforms are more likely to support inclusive transformation. When citizens are excluded or treated only as passive recipients, reforms may reproduce existing inequalities. Thus, Socio-Technical Systems Theory provides the main lens for analyzing how digital governance, transportation modernization, and media literacy interact in shaping societal transformation.

1.4 Aim of the Study

This study aims to analyze how digital governance, public transportation modernization, and media literacy are framed in Philippine policy documents and public narratives, and how their intersections influence citizen engagement and societal transformation. Specifically, the study seeks to develop an integrated socio-technical understanding of how governance reform, mobility modernization, and media literacy contribute to or constrain inclusive, participatory, and sustainable development in the Philippines.

1.5 Statement of the Problem

This study examines the intersections among digital governance, public transportation modernization, and media literacy in the Philippines. It specifically seeks to answer the following questions:

1. How is digital governance framed in Philippine policy documents and public discourse?
2. What dominant policy and public narratives shape public transportation modernization in the Philippines?

3. How is media literacy positioned within Philippine education, governance, and national development frameworks?
4. What intersections exist among digital governance, public transportation modernization, and media literacy?
5. How does citizen engagement mediate the relationship among digital governance, public transportation modernization, media literacy, and societal transformation?
6. What implications can be drawn for inclusive, participatory, and sustainable societal transformation in the Philippines?
7. What implications can be drawn for inclusive, participatory, and sustainable societal transformation in the Philippines?

2. Literature Review

2.1 Socio-Technical Transformation and Integrated Governance

Societal transformation is increasingly understood as a socio-technical process. It does not happen through technology alone. It is shaped by the interaction of technologies, institutions, infrastructures, policies, public narratives, and citizen practices. In the present study, this perspective is relevant because digital governance, public transportation modernization, and media literacy are treated as interrelated systems. The manuscript positions these domains as connected areas of reform in the Philippines, with citizen engagement serving as a central link among them.

Socio-Technical Systems Theory provides a useful foundation for this analysis. Geels (2019) explained that socio-technical transitions involve the interaction of technological innovations, institutional arrangements, user practices, markets, infrastructures, and wider political environments. This means that reforms such as digital government platforms or transport modernization cannot be evaluated only by their technical features. They must also be examined in relation to social acceptance, institutional capacity, equity, and public participation. In developing contexts, these interactions are often uneven because reforms may move faster than institutional support, stakeholder consultation, and citizen readiness.

Digital governance, transportation modernization, and media literacy also align with the broader logic of sustainable development. The United Nations has emphasized that digital innovation, sustainable infrastructure, inclusive institutions, and reduced inequality are interconnected priorities in the Sustainable Development Goals. This suggests that national reforms should not be implemented in isolated sectors. They should be aligned with inclusive governance, equitable access, and citizen empowerment. In the Philippine context, this is important because technology-driven reforms may fail to generate inclusive outcomes when digital access, transport affordability, and information literacy remain uneven.

2.2 Digital Governance and Public Sector Transformation

Digital governance refers to the use of digital technologies to transform public administration, service delivery, transparency, and citizen interaction. It goes beyond the digitization of existing procedures. It involves changes in institutional processes, inter-agency coordination, data systems, public value creation, and citizen-centered services. Mergel, Edelman, and Haug (2019) defined public sector digital transformation as a process that reshapes government structures, operations, and citizen services through digital technologies. Their study stressed that digital transformation requires organizational change and not merely the adoption of digital tools.

In the Philippines, digital governance has been formally supported through the E-Government Masterplan 2022. The plan promoted the vision of a “One Digitized Government” and aimed to harmonize government information systems, improve online public services, increase transparency, and strengthen citizen-centered service delivery. This policy direction shows that digital governance has become a national strategy for improving administrative efficiency and public service access. However, the effectiveness of this strategy depends on interoperability, institutional readiness, and citizen trust.

Recent evidence also shows that digital transformation in the Philippines remains strongly affected by connectivity gaps. The World Bank reported that equitable broadband access is needed to narrow the digital divide and allow more Filipinos to benefit from digitalization. In 2025, the World Bank also noted that support for digital transformation in the Philippines includes improved connectivity and a national digital identity system. These initiatives are important because digital government services cannot become inclusive when many citizens still lack reliable, affordable, and meaningful internet access.

The literature also suggests that digital governance may become limited when it is designed mainly for efficiency. Tangi, Janssen, Benedetti, and Noci (2021) argued that digital government transformation is shaped by both driving and impeding factors, including institutional capability, organizational readiness, and citizen orientation. When digital systems are used only for information dissemination or online transactions, participation remains shallow. This is a major concern in the present study because digital governance should support not only faster services but also meaningful citizen engagement, transparency, and accountability.

Thus, digital governance in the Philippines may be viewed as both a reform opportunity and an inclusion challenge. It can improve service delivery and administrative coordination. However, it may also reproduce inequality when citizens have unequal access to internet services, devices, digital skills, and responsive institutions. This reinforces the need to examine digital governance together with media literacy and transportation modernization, since all three domains influence how citizens access services, information, and public participation.

2.3 Public Transportation Modernization and Mobility Equity

Public transportation modernization is another major reform area in the Philippines. The Public Utility Vehicle Modernization Program was launched in 2017 to improve the road-based public transport system. It aimed to replace old and unsafe vehicles with safer and more environment-friendly units. It also included route rationalization, fleet modernization, industry consolidation, and local public transport route planning. These components show that the program was designed not only as a vehicle replacement policy but also as a restructuring of the public transport system.

Transport modernization is often justified through the language of efficiency, safety, environmental sustainability, and commuter welfare. These goals are consistent with sustainable mobility principles. Litman (2022) emphasized that transport planning should consider distributional impacts because mobility systems affect different social groups in different ways. This means that transport reform must be assessed not only by travel efficiency or environmental performance but also by affordability, accessibility, livelihood protection, and fairness. In the Philippine case, these concerns are central because small operators and drivers are among the most affected stakeholders in the modernization process.

The Philippine literature and policy discussions show that the PUV modernization agenda has generated competing narratives. Government and policy documents frame modernization as necessary for safer, cleaner, and more efficient transport. In contrast, transport groups and affected operators have raised concerns about financing requirements, consolidation rules, livelihood risks, and possible exclusion from the new system. The University of the Philippines National College of Public Administration and Governance policy note described the PUVMP as a landmark reform with several major components, but it also recognized that implementation had been contested and required deeper attention to governance and stakeholder concerns.

From a socio-technical perspective, these tensions are expected. Transport systems are not only technical systems. They are also livelihood systems, regulatory systems, and social systems. Modern vehicles, route plans, and digital transport tools may improve service quality, but they can also disrupt long-standing arrangements among drivers, operators, commuters, and local communities. This is why transport modernization should be studied through both policy documents and public narratives. The policy text may show the formal objectives of reform, while public narratives may reveal how reform is experienced, resisted, or accepted by affected groups.

Public transportation modernization is therefore directly connected to citizen engagement. Inclusive transport reform requires consultation, transparent financing mechanisms, fair transition support, and local participation in route planning. Without these, modernization may be perceived as imposed rather than co-created. This is relevant to the present study because transportation reform becomes a test case for whether digital governance and public communication systems can support inclusive and participatory transformation.

2.4 Media Literacy, Misinformation, and Civic Participation

Media literacy has become a critical concern in contemporary democratic societies. It refers to the ability to access, evaluate, analyze, create, and use information responsibly across media platforms. In the digital era, media literacy also includes the capacity to identify misinformation, understand platform influence, evaluate sources, and participate responsibly in civic discussion. Mihailidis (2018) argued that civic media literacy is important because digital abundance does not automatically produce informed citizenship. Citizens must be able to interpret information critically and use media in ways that strengthen public life.

In the Philippines, media literacy has become especially important because social media plays a large role in public communication. Online platforms are used for news, political discussion, education, public advisories, and public service information. However, they are also used to spread misinformation and disinformation. The Department of Education has maintained public advisories to correct false information involving education-related matters. This indicates that misinformation is not an abstract issue. It affects public understanding of institutions, policies, and official actions.

Recent Philippine legislative initiatives also show growing concern over media and information literacy. A 2025 House bill proposed the integration of digital, media, and information literacy into basic education to promote critical thinking, digital competence, fact-based reasoning, and ethical citizenship among Filipino learners. In the Senate, a related bill on integrating media and information literacy into the basic education curriculum was filed in 2025 and referred to committee. These developments show that media literacy is increasingly treated as a national education and governance concern.

The scholarly literature supports this policy direction. Vraga and Tully (2021) found that news literacy is related to more critical engagement with social media information. Altay, De Angelis, and Hoes (2024) also showed that media literacy interventions can improve people's ability to distinguish between true and false headlines, although such interventions may also increase skepticism toward true information. This suggests that media literacy must be carefully designed. It should promote critical evaluation without producing generalized distrust in all public information.

Media literacy is closely related to governance because citizens need reliable information to evaluate policies, understand public services, and participate in democratic processes. If citizens are vulnerable to misinformation, their ability to engage with digital governance platforms or transport reform debates may be weakened. In this sense, media literacy functions as a cognitive foundation for citizen engagement. It supports the capacity of citizens to interpret government messages, assess public narratives, and participate in policy discussions.

However, media literacy should not be reduced to individual responsibility. Misinformation is shaped by platform algorithms, political communication, media systems, economic incentives, and institutional trust. Therefore, media literacy programs should be supported by education policy, platform accountability, transparent government communication, and community-based information campaigns. This supports the argument of the present study that media literacy must be analyzed together with digital governance and transportation modernization.

2.5 Citizen Engagement as a Linking Mechanism

Citizen engagement is the central linking concept among digital governance, transportation modernization, and media literacy. In digital governance, citizen engagement refers to the ability of citizens to access services, provide feedback, participate in decision-making, and hold institutions accountable. In transportation modernization, it refers

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to the involvement of commuters, drivers, operators, local governments, and communities in planning and implementation. In media literacy, it refers to informed and responsible participation in public discourse.

The literature on public sector innovation emphasizes that citizens should not be treated only as service users. They can also be co-creators of public value. Mergel et al. (2019) argued that digital transformation changes citizen expectations of government services. Tangi et al. (2021) further noted that digital government transformation depends on both technological and organizational factors. When citizens are excluded from design and decision-making, public sector innovation may remain top-down and technocratic.

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Citizen engagement is also essential in transport reform. Route rationalization, industry consolidation, and fleet modernization affect daily mobility and livelihood. If affected stakeholders are not engaged, modernization may lead to mistrust and resistance. The policy literature on the PUVMP indicates that implementation is not only a technical issue but also a governance challenge involving social acceptance, institutional coordination, and stakeholder participation.

Media literacy strengthens citizen engagement by improving citizens' capacity to evaluate information and participate in public discussion. Citizens who can identify unreliable information are better positioned to understand reform objectives, question policy weaknesses, and participate in evidence-based dialogue. However, this requires sustained media literacy education and not only short-term awareness campaigns. The 2025 media literacy bills in the Philippines reflect this need by proposing formal integration of digital, media, and information literacy into education.

Therefore, citizen engagement may be understood as a mediating mechanism in this study. Digital governance, transport modernization, and media literacy may contribute to societal transformation only when citizens are able to access, understand, evaluate, and influence reform processes. Without meaningful engagement, reform may remain administrative, technical, or symbolic. With meaningful engagement, reform becomes more inclusive, responsive, and socially grounded.

2.6 Synthesis and Research Gap

The reviewed literature shows that digital governance, public transportation modernization, and media literacy are important areas of reform in the Philippines. Digital governance has been promoted through national strategies such as the E-Government Masterplan 2022, but it remains affected by connectivity gaps and the challenge of meaningful participation. Public transportation modernization has been pursued through the PUVMP, but it remains contested because of equity, affordability, livelihood, and implementation concerns. Media literacy has gained stronger policy attention, especially through recent legislative initiatives, but it remains a developing area that requires stronger institutionalization.

A key gap is that these domains are often studied separately. Digital governance studies tend to focus on public service delivery, interoperability, and administrative reform. Transportation studies often focus on mobility systems, modernization, sustainability, and stakeholder impacts. Media literacy studies focus on misinformation, critical thinking, and digital citizenship. These separate approaches are useful, but they do not fully explain how governance systems, mobility systems, and information systems interact in shaping societal transformation.

Another gap concerns the role of narratives. Policy documents explain formal objectives, but public narratives show how reforms are framed, interpreted, contested, and legitimized. For example, transportation modernization may be framed by government as sustainability and efficiency, but by affected groups as displacement and exclusion. Digital governance may be framed as transparency and service improvement, but citizens may experience it differently when digital access is unequal. Media literacy may be framed as individual responsibility, but misinformation is also shaped by platform and institutional conditions.

This study addresses these gaps by using document and narrative analysis to examine the intersections among digital governance, public transportation modernization, and media literacy in the Philippines. It contributes to the literature by advancing an integrated socio-technical perspective. It also positions citizen engagement as the central mechanism through which reforms may lead to inclusive, participatory, and sustainable societal transformation.

3. Methodology

3.1 Research Approach

This study employed a qualitative research approach. This approach was appropriate because the study examined meanings, policy narratives, institutional framings, and public discourses rather than numerical relationships. The focus was placed on how digital governance, public transportation modernization, and media literacy were represented in policy documents, institutional reports, academic literature, and public narratives in the Philippines. A qualitative approach allowed the study to interpret the language, assumptions, priorities, and social meanings embedded in selected documents and narratives (Creswell & Poth, 2018; Merriam & Tisdell, 2021).

The study was guided by a socio-technical perspective. This perspective was suitable because the study examined how technological systems, governance structures, infrastructure reforms, information environments, and citizen engagement interacted as part of societal transformation. The original manuscript already identified document and narrative analysis as the main methodological direction; therefore, the revised methodology retained this design but strengthened its procedural clarity, source selection process, and analytical rigor.

3.2 Research Design

The study used a qualitative document and narrative analysis design. Document analysis was used to examine official policies, legislative materials, institutional reports, and scholarly publications related to digital governance, transportation modernization, and media literacy. Document analysis was appropriate because public policies and institutional texts provide formal evidence of government priorities, reform objectives, and implementation directions (Bowen, 2009; O'Leary, 2021).

Narrative analysis was also used to examine how reforms were framed, justified, contested, and communicated in selected public documents and media-based sources. This design was useful because the study did not only ask what policies stated. It also examined how reform narratives were constructed. For example, public transportation modernization may be framed as sustainability and efficiency in government documents, but it may also be framed as displacement and livelihood risk in public discourse. Narrative analysis helped reveal these competing meanings and their implications for citizen engagement and societal transformation (Riessman, 2008).

The combination of document analysis and narrative analysis was therefore suitable for the study. Document analysis provided the structural and policy basis of the inquiry. Narrative analysis provided the interpretive lens for understanding public meanings, tensions, and stakeholder positions. Together, these methods supported an integrated socio-technical reading of digital governance, public transportation modernization, and media literacy.

3.3 Sources of Data

The study used secondary documentary sources. No primary data were collected from human participants. The data sources consisted of publicly available materials published from 2018 to 2026. These sources were selected because they reflected recent developments in digital governance, transportation modernization, media literacy, and citizen engagement in the Philippines.

The documentary sources included government policies, legislative bills, executive issuances, official agency reports, congressional policy briefs, peer-reviewed journal articles, institutional reports, and credible media or public discourse materials. Government and legislative documents were used to identify formal policy directions. Academic sources were used to support theoretical and empirical grounding. Institutional and media-based sources were used to capture public narratives and stakeholder perspectives.

The major source categories are shown in Table 1.

Table 1
Sources of Data Used in the Study

Source Category	Examples of Sources	Purpose in the Study
Government policy documents	E-government plans, transportation modernization policies, education and media literacy policies	To examine formal policy priorities and institutional framing
Legislative and congressional documents	Bills, policy briefs, congressional reports, committee materials	To identify policy debates, reform directions, and governance concerns
Academic literature	Peer-reviewed journal articles from 2018 onward	To provide theoretical, empirical, and methodological grounding
Institutional reports	Reports from government agencies, international organizations, and policy institutions	To support contextual analysis and identify development issues
Public discourse materials	Credible news reports, public statements, and media-based narratives	To examine how reforms were communicated, contested, and interpreted

3.4 Search Strategy and Document Identification

A structured search strategy was used to identify relevant documents. The search covered academic databases, government websites, legislative repositories, institutional websites, and credible media sources. Academic materials were searched through databases and scholarly platforms such as Google Scholar, Scopus-indexed journals, Web of Science-indexed journals, and publisher databases. Policy and legislative documents were searched through official websites of Philippine government agencies, Congress, the Senate, the Department of Information and Communications Technology, the Department of Transportation, the Department of Education, and other relevant institutions.

The search terms included combinations of the following keywords: “digital governance Philippines,” “e-government Philippines,” “digital transformation public sector,” “Public Utility Vehicle Modernization Program,” “PUV modernization Philippines,” “transport modernization Philippines,” “media literacy Philippines,” “media and information literacy,” “misinformation Philippines,” “citizen engagement,” “socio-technical systems,” and “societal transformation.”

Boolean operators were used to refine the search. Examples included “digital governance” AND “Philippines,” “PUV modernization” AND “equity,” “media literacy” AND “misinformation,” and “citizen engagement” AND “digital government.” The search was limited mainly to sources published from 2018 to 2026, except for foundational methodological and theoretical sources.

3.5 Selection Procedure

The selection of documents was guided by a PRISMA-informed process. PRISMA was used not as a full systematic review protocol but as a transparency guide for identifying, screening, and selecting documentary evidence. This was appropriate because the study involved document-based qualitative synthesis and required a clear record of how sources were located and included (Page et al., 2021).

The selection process followed four stages. First, potentially relevant documents were identified through database and website searches. Second, duplicate and irrelevant materials were removed. Third, titles, abstracts, executive summaries, or introductory sections were screened based on relevance to the study domains. Fourth, eligible documents were reviewed in full and included if they met the inclusion criteria.

The study applied the following inclusion criteria:

1. The document focused on at least one of the three major domains: digital governance, public transportation modernization, or media literacy.
2. The document was relevant to the Philippine context or provided a theoretical or comparative basis applicable to the study.
3. The document was published from 2018 to 2026, except for foundational theories and methodology references.
4. The document came from a credible source, such as a peer-reviewed journal, government agency, legislative body, international organization, university policy center, or reputable media institution.
5. The document contained policy, institutional, theoretical, empirical, or narrative content relevant to citizen engagement and societal transformation.

The exclusion criteria were as follows:

1. Documents that were unrelated to the three study domains.
2. Sources without identifiable authorship, institutional origin, or publication details.
3. Opinion-based materials without policy, empirical, or analytical relevance.
4. Sources with unverifiable publication details.
5. Documents focused only on technical issues without connection to governance, participation, equity, media literacy, or societal implications.

3.6 Data Extraction

A data extraction matrix was prepared to organize the selected documents. Each document was reviewed and coded according to bibliographic information, source type, domain focus, key policy or narrative framing, relevance to citizen engagement, and implication for societal transformation.

The extraction matrix included the following fields: author or issuing institution, year of publication, title of document, type of source, domain classification, main argument or policy position, key concepts, stakeholder representation, identified issues, and relevance to the study questions. This procedure helped ensure that the analysis was systematic and transparent.

Table 2. Data Extraction Matrix

Data Extraction Field	Description
Author or institution	Name of author, agency, organization, or issuing body
Year	Publication or release year
Title	Full title of the document
Source type	Policy, legislation, academic article, report, or media source
Domain focus	Digital governance, transport modernization, media literacy, or cross-sectoral
Main framing	Dominant policy or public narrative
Citizen engagement dimension	Participation, access, consultation, trust, or public response
Key issue identified	Main problem, gap, or tension in the document
Relevance to societal transformation	Implication for inclusivity, participation, sustainability, or governance reform

3.7 Data Analysis

The data were analyzed using thematic analysis, narrative analysis, and cross-sectoral synthesis. These procedures were used sequentially and interactively.

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First, thematic analysis was conducted to identify recurring patterns across the selected documents. Thematic analysis followed the general procedures of familiarization, coding, theme development, theme review, theme refinement, and interpretation. This process was consistent with recent qualitative guidance on thematic analysis, which emphasizes systematic coding, reflexive interpretation, and clear theme construction (Braun & Clarke, 2021, 2022).

Initial codes were developed from both the theoretical framework and the research questions. Deductive codes included digital governance, transport modernization, media literacy, citizen engagement, digital divide, institutional trust, inclusion, participation, and sustainability. Inductive codes were also generated from the documents. These included efficiency-driven governance, displacement narrative, policy fragmentation, misinformation vulnerability, stakeholder resistance, and public trust deficit.

Second, narrative analysis was conducted to examine how reforms were framed and communicated. This analysis focused on the language, storylines, assumptions, actor positioning, and tensions found in the documents. The study examined how government and institutional sources framed digital transformation, transport modernization, and media literacy. It also examined how public narratives represented citizens, commuters, drivers, government agencies, learners, and communities.

Third, cross-sectoral synthesis was conducted to integrate the findings across the three domains. This step identified intersections among digital governance, transportation modernization, and media literacy. It also examined how citizen engagement functioned as a linking mechanism across institutional systems, infrastructure systems, and information systems. This synthesis was aligned with the socio-technical framework of the study.

3.8 Analytical Framework

The study used a socio-technical analytical framework. This framework was organized around three interconnected domains: institutional systems, mobility systems, and cognitive-information systems. Digital governance represented the institutional system. Public transportation modernization represented the mobility system. Media literacy represented the cognitive-information system. Citizen engagement was treated as the mediating mechanism that linked these domains to societal transformation.

Table 3. Analytical Framework of the Study

Domain	Analytical Focus	Guiding Question
Digital governance	Policy framing, service delivery, participation, transparency, digital inclusion	How is digital governance framed in Philippine policy and discourse?
Public transportation modernization	Modernization narratives, equity, displacement, mobility access, stakeholder participation	What narratives shape public transportation modernization?
Media literacy	Misinformation, civic competence, digital literacy, education policy, public communication	How is media literacy positioned in policy and public discourse?
Citizen engagement	Access, participation, consultation, trust, co-creation, civic response	How does citizen engagement connect the three domains?
Societal transformation	Inclusivity, sustainability, participation, institutional reform, public value	What implications emerge for inclusive transformation?

3.9 Trustworthiness and Rigor

The study applied the qualitative trustworthiness criteria of credibility, dependability, confirmability, and transferability. These criteria are widely used to strengthen rigor in qualitative inquiry (Lincoln & Guba, 1985; Nowell et al., 2017).

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Credibility was supported through data triangulation. Different types of sources were used, including government documents, legislative materials, academic publications, institutional reports, and public discourse materials. This allowed the study to compare formal policy positions with scholarly interpretations and public narratives.

Dependability was supported through a clear audit trail. The researcher documented the search strategy, inclusion and exclusion criteria, document screening, data extraction process, coding procedure, and theme development. This strengthened procedural transparency.

Confirmability was addressed through reflexive analysis. The researcher examined how interpretations were grounded in the documents rather than personal assumptions. Coding decisions and theme development were reviewed against the original sources to ensure that findings were supported by evidence.

Transferability was supported through thick description. The study provided sufficient contextual detail about the Philippine setting, including governance reforms, transport modernization, media literacy concerns, and citizen engagement issues. This allowed readers to assess whether the findings may be relevant to other developing or socio-technical reform contexts.

3.10 Ethical Considerations

The study used publicly available documents and did not involve human participants. Therefore, the research did not require informed consent, anonymity procedures, or direct participant protection measures. However, ethical standards were still observed. All sources were properly cited. The study avoided misrepresentation of policy documents, academic literature, and public narratives. It also maintained neutrality when analyzing contested issues such as transportation modernization and misinformation.

The study followed ethical principles relevant to document-based research. These included intellectual honesty, accurate citation, responsible interpretation, and respect for the original context of sources. Care was taken to avoid selective reporting. Conflicting narratives were presented fairly, especially in areas where government policy objectives and stakeholder concerns differed.

3.11 Methodological Limitation

The study was limited to documentary and narrative sources. Since no interviews or surveys were conducted, the findings depended on the availability, credibility, and scope of existing documents. The study did not measure public attitudes statistically. It also did not evaluate policy implementation through fieldwork. However, the use of multiple documentary sources provided a broad and credible basis for analyzing policy framings, public narratives, and cross-sectoral implications.

4. Findings

4.1 Findings for SoP 1

How is digital governance framed in Philippine policy documents and public discourse?

The findings in table 3 show that digital governance in the Philippines is framed mainly as a tool for public service efficiency, transparency, interoperability, and digital inclusion. However, citizen participation is less emphasized. This means that digital governance is still presented more as a service delivery mechanism than as a participatory governance platform. This finding is aligned with the focus of the manuscript, which examines digital governance as one of the key domains linked to societal transformation.

Table 4. Findings on Digital Governance Framing in the Philippines

Theme	Finding	Brief Discussion	Citation/s
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Theme	Finding	Brief Discussion	Citation/s
Service efficiency	Digital governance is framed as a way to make public services faster, easier, and more accessible.	This shows that government digitalization is mainly viewed as an administrative reform. The emphasis is on improving transactions, reducing delays, and strengthening online service delivery.	Mergel et al. (2019); Department of Information and Communications Technology [DICT] (2022)
Transparency	Digital governance is framed as a mechanism for improving access to government information.	Online platforms are presented as tools for openness and accountability. However, transparency depends not only on digital access but also on reliable data, institutional trust, and responsive public agencies.	DICT (2022); Tangi et al. (2021)
Interoperability	Digital governance is framed as a strategy for connecting government systems and reducing fragmented services.	This finding suggests that digital governance is also used to address weak coordination among agencies. Interoperable systems may improve efficiency, but they require strong institutional capacity and data governance.	DICT (2022); Tangi et al. (2021)
Digital inclusion	Digital governance is linked to broader concerns about internet access, digital skills, and connectivity.	The finding shows that digital transformation can exclude citizens who lack stable internet access, devices, or digital literacy. Therefore, digital governance cannot be separated from the digital divide.	World Bank (2024, 2025)
Citizen participation	Citizen participation is present in policy language, but it is less developed in practical framing.	Citizens are mostly framed as users of digital services rather than co-creators of policies. This limits the democratic potential of digital governance. Digital government transformation requires citizen orientation, not only technological readiness.	Mergel et al. (2019); Tangi et al. (2021)

4.2 Findings for SoP 2

What dominant policy and public narratives shape public transportation modernization in the Philippines?

The findings in table 4 show that public transportation modernization in the Philippines is framed through two competing narratives. The policy narrative presents modernization as a reform for safety, efficiency, sustainability, and better commuter service. The public and stakeholder narrative presents modernization as a costly transition that may affect the livelihood of drivers and small operators. This finding supports the manuscript’s focus on public transportation modernization as a socio-technical issue, not merely as an infrastructure reform.

Table 5. Findings on Public Transportation Modernization Narratives in the Philippines

Theme	Finding	Brief Discussion	Citation/s
Sustainable mobility	Public transportation modernization is framed as a shift toward safer, cleaner, and more efficient mobility.	This framing supports the goal of replacing outdated public utility vehicles, improving road safety, and reducing environmental impacts. However, sustainability should also include social equity and affordability.	Congressional Policy and Budget Research Department [CPBRD] (2020); Litman (2022)
Service improvement	Modernization is framed as a way to improve commuter experience and public transport reliability.	The policy discourse emphasizes better vehicles, improved routes, and more organized transport operations. This shows that commuters are presented as	CPBRD (2020); University of the Philippines National College of Public Administration and

Theme	Finding	Brief Discussion	Citation/s
		major beneficiaries of the reform.	Governance [UP-NCPAG] (2023)
Economic burden	Public discourse frames modernization as financially difficult for small operators and drivers.	The cost of modern units, consolidation requirements, and compliance procedures may create pressure on affected stakeholders. This shows that modernization has unequal effects across groups.	CPBRD (2020); UP-NCPAG (2023)
Livelihood risk	Transportation modernization is framed as a possible source of displacement for traditional drivers and operators.	This finding highlights the social cost of reform. If transition support is weak, modernization may improve the system while placing vulnerable transport workers at risk.	UP-NCPAG (2023); Litman (2022)
Contested reform	Modernization is framed as a debated and negotiated policy process.	Public debates, stakeholder resistance, and policy adjustments show that the reform is socially contested. This indicates that effective modernization requires consultation, trust, and inclusive implementation.	CPBRD (2020); UP-NCPAG (2023)

4.3 Findings for SoP 3

How is media literacy positioned within Philippine education, governance, and national development frameworks?

The findings in table 5 show that media literacy in the Philippines is framed as a necessary response to misinformation, digital citizenship, and civic participation. However, it remains less institutionalized than digital governance and transportation modernization. This means that media literacy is recognized as important, but its implementation remains fragmented across education, public communication, and governance systems.

Table 6. Findings on Media Literacy in Philippine Education, Governance, and National Development Frameworks

Theme	Finding	Brief Discussion	Citation/s
Response to misinformation	Media literacy is framed as a tool for helping citizens identify false, misleading, and unreliable information.	This shows that media literacy is increasingly treated as a protective skill in the digital environment. It is needed because misinformation can weaken public trust, distort policy understanding, and affect democratic participation.	Department of Education [DepEd] (2026); Vraga and Tully (2021)
Digital citizenship	Media literacy is positioned as part of responsible and ethical digital participation.	The emphasis is not only on accessing information but also on evaluating, sharing, and using information responsibly. This supports the development of informed and accountable citizens.	Mihailidis (2018); House of Representatives of the Philippines (2025)
Education integration	Media literacy is increasingly linked to curriculum reform and	Legislative proposals show that media and information literacy is being positioned as part of basic education.	House of Representatives of the Philippines (2025);

Theme	Finding	Brief Discussion	Citation/s
	learner competence.	However, implementation requires teacher training, curriculum resources, and assessment mechanisms.	Senate of the Philippines (2025)
Civic participation	Media literacy is framed as a foundation for informed participation in public discourse.	Citizens who can evaluate information critically are more able to understand policies, question public narratives, and participate in governance processes.	Vraga and Tully (2021); Mihailidis (2018)
Fragmented institutionalization	Media literacy is recognized as important, but its governance and implementation remain fragmented.	Media literacy is present in education and public discourse, but it is not yet fully integrated across governance, communication, and national development systems. This limits its wider societal impact.	House of Representatives of the Philippines (2025); Senate of the Philippines (2025)

For SoP 3, the findings in table 6 indicate that media literacy is positioned as a civic and educational response to misinformation and digital participation. It is increasingly recognized in policy discussions, especially in relation to learner development, responsible media use, and democratic citizenship. However, media literacy remains fragmented. It needs stronger institutionalization through curriculum integration, teacher preparation, public awareness programs, and connection with digital governance initiatives. Without this integration, media literacy may remain a limited educational intervention rather than a broader tool for societal transformation.

4.4 Findings for SoP 4

What intersections exist among digital governance, public transportation modernization, and media literacy?

The findings show that digital governance, public transportation modernization, and media literacy intersect through access, participation, public trust, information quality, and policy coordination. These intersections indicate that the three domains are not separate reform areas. They operate as connected socio-technical systems that influence how citizens receive services, understand reforms, and participate in national development.

Table 7. Findings on the Intersections among Digital Governance, Public Transportation Modernization, and Media Literacy

Theme	Finding	Brief Discussion	Citation/s
Access and inclusion	The three domains intersect through unequal access to digital services, transport systems, and reliable information.	Citizens who lack internet access, affordable mobility, or media literacy may be excluded from public services and reform benefits. This shows that inclusion must be treated as a shared concern across governance, mobility, and information systems.	World Bank (2024, 2025); Litman (2022)
Citizen participation	Digital governance platforms, transport consultations, and media literacy all influence the quality of citizen engagement.	Digital platforms may expand participation, but citizens must have the skills and confidence to use them. Transport reforms also require consultation with affected groups. Media literacy supports informed participation in policy debates.	Mergel et al. (2019); Tangi et al. (2021); Vraga and Tully (2021)
Public trust	Trust connects the three domains because citizens must trust government systems, reform processes, and public	Weak trust may reduce the use of digital services, increase resistance to transport reforms, and make citizens more vulnerable to misinformation. Trust is therefore essential for societal	Tangi et al. (2021); Mihailidis (2018)

Theme	Finding	Brief Discussion	Citation/s
	information.	transformation.	
Information quality	Media literacy affects how citizens understand digital governance and transportation modernization.	Citizens need reliable information to evaluate policies, respond to public advisories, and distinguish between evidence-based claims and misleading narratives. This makes media literacy a support mechanism for governance and transport reform.	DepEd (2026); Vraga and Tully (2021)
Policy coordination	The three domains require coordinated policies rather than separate reforms.	Digital governance, mobility reform, and media literacy can support each other when aligned. However, fragmented implementation may weaken their combined effect on inclusion and participation.	Geels (2019); DICT (2022); UP-NCPAG (2023)

For SoP 4, the findings indicate that digital governance, public transportation modernization, and media literacy intersect through shared concerns on access, participation, trust, information quality, and policy coordination. These intersections show that societal transformation cannot be achieved through isolated reforms. Digital governance can support transport reform and public communication. Media literacy can help citizens understand and evaluate policy narratives. Transportation modernization can become more inclusive when supported by digital participation and clear public information. Therefore, the three domains should be treated as connected systems within a broader socio-technical transformation process.

4.5 Findings for SoP 5

How does citizen engagement mediate the relationship among digital governance, public transportation modernization, media literacy, and societal transformation?

The findings show that citizen engagement serves as the linking mechanism among digital governance, public transportation modernization, and media literacy. It connects institutional reforms, mobility reforms, and information practices to broader societal transformation. However, citizen engagement remains uneven because access, trust, consultation, and digital competence are still limited.

Table 8. Findings on Citizen Engagement as a Mediating Mechanism

Theme	Finding	Brief Discussion	Citation/s
Access to participation	Citizen engagement depends on citizens' ability to access digital platforms, transport consultations, and reliable information.	Citizens cannot participate meaningfully when they lack internet access, digital skills, transport access, or credible information. This shows that engagement is shaped by both technological and social conditions.	World Bank (2024, 2025); Tangi et al. (2021)
Citizen as service user	In digital governance, citizens are often framed as users of services rather than active contributors to decision-making.	This limits the participatory value of digital governance. Online platforms may improve service delivery, but they do not automatically create co-creation or policy participation.	Mergel et al. (2019); DICT (2022)
Stakeholder voice in transport reform	In transportation modernization, citizen engagement appears through the participation of drivers, operators, commuters, and local communities.	The contested nature of PUV modernization shows that reform needs stakeholder consultation and transition support. Without this, modernization may be seen as imposed rather than participatory.	CPBRD (2020); UP-NCPAG (2023); Litman (2022)

Theme	Finding	Brief Discussion	Citation/s
Informed civic participation	Media literacy strengthens citizen engagement by helping people evaluate public information and policy narratives.	Citizens with stronger media literacy are better able to assess government messages, identify misinformation, and participate in public discussion.	Mihailidis (2018); Vraga and Tully (2021)
Trust and legitimacy	Citizen engagement improves when people trust institutions, reform processes, and information sources.	Trust affects whether citizens use digital services, accept transport reforms, and rely on official information. Weak trust reduces the transformative effect of reforms.	Tangi et al. (2021); Geels (2019)
Pathway to societal transformation	Citizen engagement mediates societal transformation by converting reforms into participatory, inclusive, and socially accepted outcomes.	Digital governance, transport modernization, and media literacy become transformative only when citizens are able to access, understand, question, and influence reform processes.	Geels (2019); Mergel et al. (2019); Vraga and Tully (2021)

For SoP 5, the findings indicate that citizen engagement mediates the relationship among digital governance, public transportation modernization, media literacy, and societal transformation. Digital governance provides platforms and services. Transportation modernization changes mobility systems and public access. Media literacy enables citizens to understand and evaluate information. However, these domains contribute to transformation only when citizens are actively involved. Therefore, citizen engagement is not a separate outcome. It is the mechanism that allows reforms to become inclusive, trusted, and socially meaningful.

4.6 Findings for SoP 6

What implications can be drawn for inclusive, participatory, and sustainable societal transformation in the Philippines?

The findings show that societal transformation in the Philippines requires more than separate reforms in digital governance, public transportation, and media literacy. Transformation becomes inclusive and sustainable only when reforms are coordinated, citizen-centered, accessible, and supported by trust. The three domains must therefore be treated as connected systems rather than separate policy areas.

Table 9. Findings on the Implications for Inclusive, Participatory, and Sustainable Societal Transformation

Theme	Finding	Brief Discussion	Citation/s
Integrated policy design	Societal transformation requires stronger coordination among digital governance, transportation modernization, and media literacy policies.	Fragmented reforms may produce limited impact. Digital systems, mobility reforms, and information literacy programs should be aligned to support common goals of inclusion, participation, and sustainability.	Geels (2019); DICT (2022)
Inclusive access	Transformation depends on equal access to digital services, transport systems, and reliable information.	Citizens who lack internet access, affordable mobility, or media literacy may be excluded from the benefits of reform. Inclusion must therefore be treated as a core policy requirement.	World Bank (2024, 2025); Litman (2022)
Participatory governance	Reforms become more legitimate when citizens and affected stakeholders are involved in decision-making.	Digital governance should move beyond service delivery. Transport modernization should include drivers, operators, commuters, and local communities. Media literacy should support informed public	Mergel et al. (2019); Tangi et al. (2021); UP-NCPAG (2023)

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Theme	Finding	Brief Discussion	Citation/s
		participation.	
Social protection in modernization	Sustainable transformation requires protection for groups affected by infrastructure reform.	Public transport modernization may improve services, but it can also create livelihood risks. Transition support, consultation, financing assistance, and fair implementation are needed.	CPBRD (2020); Litman (2022)
Media literacy as civic capacity	Media literacy should be treated as a national development tool, not only as an educational topic.	Citizens need media literacy to evaluate public information, resist misinformation, understand policies, and participate responsibly in public discourse.	Mihailidis (2018); Vraga and Tully (2021)
Trust-building	Institutional trust is necessary for digital services, transport reforms, and public communication to be accepted.	Trust grows when reforms are transparent, responsive, fair, and supported by reliable information. Without trust, even technically sound reforms may face resistance.	Tangi et al. (2021); Geels (2019)
Sustainable transformation	Societal transformation is achieved when technological, institutional, infrastructural, and civic systems work together.	The findings support a socio-technical view of development. Technology and infrastructure reforms must be matched with citizen engagement, equity, and institutional accountability.	Geels (2019); Mergel et al. (2019)

For SoP 6, the findings indicate that inclusive, participatory, and sustainable societal transformation requires integrated reform. Digital governance can improve public services, but it must address inclusion and participation. Public transportation modernization can improve mobility, but it must protect affected stakeholders. Media literacy can strengthen civic participation, but it must be institutionalized across education and governance systems. Overall, societal transformation depends on the alignment of technology, infrastructure, information, and citizen engagement.

5. Discussion

The findings indicate that digital governance, public transportation modernization, and media literacy are interconnected domains of societal transformation in the Philippines. These domains are often implemented as separate policy areas. However, the results show that they intersect through access, participation, trust, information quality, and policy coordination. This supports the socio-technical perspective of the study, which views technological systems, institutional systems, infrastructure systems, and citizen practices as mutually connected. The original manuscript also positioned these three domains as linked components of societal transformation.

Table 10. Discussion of Findings Based on the Statement of the Problem

SoP	Key Finding	Discussion	Citation/s
SoP 1: Digital governance framing	Digital governance is framed mainly as efficiency, transparency, interoperability, and digital inclusion.	This finding shows that digital governance in the Philippines remains strongly service-oriented. Government digitalization is used to improve public transactions and administrative coordination. However, its participatory function remains limited. This suggests that digital governance must move from service delivery toward co-creation and citizen participation.	DICT (2022); Mergel et al. (2019); Tangi et al. (2021)

SoP	Key Finding	Discussion	Citation/s
SoP 2: Transportation modernization narratives	Public transportation modernization is framed through competing narratives of reform and burden.	The policy narrative emphasizes safety, sustainability, and service improvement. However, stakeholder narratives emphasize cost, livelihood risk, and displacement. This shows that modernization is a socio-technical transition. It affects not only vehicles and routes but also livelihoods, equity, and public trust.	CPBRD (2020); UP-NCPAG (2023); Litman (2022)
SoP 3: Media literacy positioning	Media literacy is positioned as a response to misinformation and digital citizenship needs.	Media literacy is increasingly recognized as important in education and governance. However, it remains fragmented. It has not yet been fully institutionalized as a national civic capacity. This limits its role in strengthening informed public participation.	Mihailidis (2018); Vraga & Tully (2021); House of Representatives of the Philippines (2025)
SoP 4: Intersections among domains	The three domains intersect through access, participation, trust, information quality, and policy coordination.	The findings show that digital governance, transportation modernization, and media literacy influence one another. Digital access affects participation. Transport reform requires public trust. Media literacy affects how citizens understand public policies. Therefore, these reforms should not be treated separately.	Geels (2019); Mergel et al. (2019); Litman (2022)
SoP 5: Citizen engagement as mediator	Citizen engagement links the three domains to societal transformation.	Citizen engagement functions as the mechanism that converts reform into social impact. Without active citizen participation, digital platforms remain transactional, transport reforms remain contested, and media literacy remains limited to awareness. Engagement gives reforms legitimacy and social meaning.	Geels (2019); Tangi et al. (2021); Vraga & Tully (2021)
SoP 6: Implications for societal transformation	Inclusive transformation requires integrated, participatory, and trust-based reform.	The findings imply that societal transformation cannot be achieved through technical reform alone. It requires equity, access, social protection, reliable information, and citizen participation. This confirms the need for a coordinated socio-technical approach.	Geels (2019); Mergel et al. (2019); World Bank (2024, 2025)

The study shows that societal transformation in the Philippines is shaped by the interaction of governance, mobility, and information systems. Digital governance provides the institutional and technological platform for public service improvement. Public transportation modernization provides the infrastructure for mobility and access. Media literacy provides the cognitive capacity for citizens to evaluate information and participate in public discourse.

However, the findings also show that these reforms remain uneven. Digital governance is still largely framed as service delivery. Public transportation modernization remains socially contested. Media literacy remains fragmented across education and governance systems. These limitations suggest that the transformative potential of these reforms depends on the extent to which citizens are included, informed, and trusted as active participants.

The findings support Socio-Technical Systems Theory. Reforms do not succeed because of technology alone. They succeed when technology is aligned with institutions, social needs, public trust, and citizen capability. In this study,

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citizen engagement emerged as the central mechanism that links digital governance, transport modernization, and media literacy to inclusive societal transformation.

Therefore, the discussion confirms that the Philippines needs a more integrated reform approach. Digital governance should support participation, not only transactions. Transportation modernization should protect affected stakeholders, not only modernize vehicles. Media literacy should be treated as a national civic capacity, not only as a school-based topic. When these domains are aligned, they can contribute to a more inclusive, participatory, and sustainable society.

6. Conclusion

This study examined how digital governance, public transportation modernization, and media literacy were framed in Philippine policy documents and public discourse. The findings showed that these three domains were closely connected. Digital governance was framed mainly as a tool for efficiency, transparency, interoperability, and digital inclusion. Public transportation modernization was framed through competing narratives of service improvement and socio-economic burden. Media literacy was positioned as a response to misinformation, digital citizenship, and civic participation, but its institutionalization remained limited.

The study further concluded that these domains should not be treated as separate reform areas. They intersected through access, participation, public trust, information quality, and policy coordination. These intersections showed that societal transformation depends on the alignment of technological, institutional, infrastructural, and cognitive systems. This finding supports the socio-technical perspective that reforms become meaningful only when technology and infrastructure are connected with social needs, institutional capacity, and citizen participation.

Citizen engagement emerged as the central mediating mechanism in the study. Digital governance, transport modernization, and media literacy can support societal transformation only when citizens are able to access services, understand public information, participate in reform processes, and trust institutions. Without citizen engagement, digital governance may remain transactional, transport modernization may remain contested, and media literacy may remain limited to awareness-building. Therefore, inclusive and sustainable societal transformation in the Philippines requires integrated reforms that are participatory, equitable, transparent, and responsive to public needs.

The study concluded that digital and infrastructural reforms are not sufficient by themselves. They must be supported by social protection, media literacy, institutional trust, and meaningful public participation. A coordinated socio-technical approach is needed so that governance reform, mobility modernization, and information literacy can collectively contribute to a more inclusive, informed, and sustainable society.

7. Recommendations

Based on the findings and conclusion, the following recommendations are proposed.

Table 11. Recommendations Based on the Findings of the Study

Area	Recommendation	Brief Explanation
Digital governance	Strengthen participatory digital governance platforms.	Government digital systems should go beyond online service delivery. They should include feedback tools, consultation spaces, citizen reporting systems, and mechanisms that show how public inputs are used in decision-making.
Digital inclusion	Improve internet access and digital literacy among	Digital governance can only become inclusive when citizens have affordable connectivity, usable devices, and adequate

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Area	Recommendation	Brief Explanation
	underserved communities.	digital skills. Rural communities, low-income groups, older citizens, and marginalized sectors should be prioritized.
Transportation modernization	Provide stronger transition support for affected drivers and operators.	Modernization should include financing assistance, phased implementation, livelihood support, and clear guidance for small operators. This can reduce resistance and improve fairness.
Transport participation	Institutionalize stakeholder consultation in transport reform.	Drivers, operators, commuters, local governments, and community groups should be included in route planning, implementation review, and policy adjustment.
Media literacy	Integrate media and information literacy more fully into education and civic programs.	Media literacy should be strengthened across basic education, higher education, community learning, and public awareness programs. It should include critical thinking, fact-checking, responsible sharing, and civic communication.
Public communication	Improve the clarity and credibility of government communication.	Public agencies should provide accessible, timely, and evidence-based information about reforms. This can reduce misinformation and strengthen institutional trust.
Policy coordination	Develop an integrated framework linking digital governance, transportation, and media literacy.	Separate reforms may produce limited impact. A cross-sectoral framework can help align public services, mobility systems, information literacy, and citizen participation.
Future research	Conduct empirical studies involving citizens and affected stakeholders.	Future studies may use interviews, surveys, or mixed methods to examine how citizens, drivers, operators, commuters, teachers, and learners experience these reforms.

It is recommended that Philippine reform efforts be designed through a more integrated and citizen-centered approach. Digital governance should be made more participatory. Transportation modernization should be made more socially protective. Media literacy should be made more institutionalized and civic-oriented. These actions can help ensure that societal transformation is not limited to technology and infrastructure, but also includes equity, trust, participation, and informed citizenship.

Declaration

Author Contributions

Anna Sheila I. Crisostomo served as the main researcher and lead author of the study. She conceptualized the research, designed the document and narrative analysis approach, gathered and organized the relevant policy documents, legislative materials, institutional reports, academic literature, and public discourse sources, conducted the analysis, prepared the initial manuscript, and integrated the revisions. Michael C. Legion contributed to the refinement of the methodology, review of related literature, interpretation of findings, and technical review of the manuscript. Leonila P. Clamo contributed to the analysis of Philippine policy contexts, synthesis of findings, discussion, and review of the manuscript. Regz E. Guiral contributed to the organization of results, recommendations, reference checking, formatting, and final review of the article. All authors reviewed and approved the final version of the manuscript for publication.

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Conflict of Interest

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The authors declare that they have no conflict of interest related to the conduct, authorship, or publication of this study.

Ethical Considerations

The study was conducted with due consideration of research ethics. Since the research used publicly available policy documents, legislative materials, institutional reports, academic literature, and public discourse sources, no direct human participation was involved. No personal, confidential, or sensitive data were collected. All sources were used only for academic and research purposes and were properly cited in the manuscript.

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Use of Artificial Intelligence

Artificial intelligence tools were used only for language refinement, grammar checking, formatting assistance, and improvement of manuscript readability. The authors remained fully responsible for the intellectual content, research design, source selection, document analysis, narrative analysis, interpretation of findings, citations, and final approval of the manuscript. No artificial intelligence tool was used to generate, fabricate, alter, or manipulate research data or sources.

Data Availability

The data supporting the findings of this study were derived from publicly available documents, including government policies, legislative materials, institutional reports, academic literature, and public discourse sources. These sources are cited in the manuscript and may be accessed through their respective official or published platforms.

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