

Efforts on Digitalization of Frontline Services in the Philippine Government Setting

Jerson M. Caotivo, MPM

Biliran Province State University-Biliran Campus, Naval, Biliran 6560, Philippines

Corresponding Email: jerson.caotivo@bipsu.edu.ph

The digital transformation of frontline services has emerged as an imperative for modern governance, particularly in developing countries like the Philippines. With over 1,600 local government units (LGUs), 455 national government agencies (NGAs), and a population exceeding 115 million, the demand for efficient, secure, and accessible public services has significantly intensified. The COVID-19 pandemic underscored the urgency of this transformation, forcing the government to shift rapidly toward digital platforms to sustain public service delivery, uphold transparency, and reduce physical contact.

President Ferdinand Marcos Jr., in his 2023 State of the Nation Address, declared that “digitalization is the call of today,” signaling a strategic pivot from seeing digital reform as a long-term goal to recognizing it as a current necessity. In response, the Philippine government has launched numerous digital initiatives such as the eGovPH Super App, eTravel system, the Digital National ID, and the broader eGovernment Master Plan under the Department of Information and Communications Technology (DICT). These projects aim to centralize services, simplify procedures, and enhance user experience across agencies and sectors.

One key area of innovation is the integration of digital platforms like eGovPH, eKYC, eGovPay, and eHealth, which facilitate seamless citizen transactions with government entities. For example, more than 927 LGUs have digitized their business permit and licensing systems, significantly cutting processing time and limiting corruption-prone in-person interactions. Projects such as eLGU, a joint effort by DICT, the Department of the Interior and Local Government (DILG), and the Anti-Red Tape Authority (ARTA), have enabled digital applications for barangay clearances, real property tax, and civil registry documents. These developments signal a move away from paper-based bureaucracy toward proactive, citizen-centered governance (Department of Information and Communications Technology [DICT], 2024).

At the core of these efforts lies the "Whole-of-Government Approach," through which platforms like the eGovPH Super App integrate healthcare, education,

employment, transportation, and digital identity services. Interoperability is further advanced through Application Programming Interfaces (APIs) and the Government-As-A-Service (GaaS) model, which underpin the eGov Data Exchange Platform (eGovDX). As of late 2024, more than 1,200 systems have been interconnected, enabling over 410 million transactions, thereby enhancing service efficiency, reducing data redundancy, and supporting analytics-based decision-making (DICT, 2024).

These technological shifts are framed by institutional mechanisms such as the Information Systems Strategic Plan (ISSP), which aligns agency-level digital projects with national objectives. As of 2024, 306 out of 495 agencies had active ISSP endorsements, ensuring that IT investments are strategically planned, cost-effective, and sustainable. Each ISSP roadmap outlines agency-specific goals for hardware acquisition, cybersecurity standards, digital literacy training, and systems integration. The framework reduces siloed operations and encourages inter-agency collaboration.

The sustainability of these reforms, however, depends on the capacities and experiences of so-called “digital frontliners”—government personnel responsible for managing and operating digital systems. As Villaseñor (2024) notes, these employees face substantial challenges, including outdated infrastructure, inconsistent internet connectivity in rural areas, and a lack of adequate training. In a survey of 400 digital frontliners, findings revealed a strong need for more structured capacity-building programs and institutional support. Many frontliners reported moderate satisfaction with their roles, which increased significantly when continuous training and technical support were made available.

To better understand the behavior of technology adopters in government, the Unified Theory of Acceptance and Use of Technology (UTAUT) offers valuable insights. The model emphasizes the roles of performance expectancy, effort expectancy, social influence, and facilitating conditions. In the context of the Philippine bureaucracy, the presence of supportive environments and organizational incentives can drive user acceptance and effective utilization of digital tools (Villaseñor, 2024).

Parallel to these reforms is the critical issue of cybersecurity and data governance. As digital platforms proliferate, the risk of breaches and data misuse also escalates. The government has responded with a “Zero Trust” security model that

enforces layered encryption and rigorous identity authentication. Furthermore, the eGovChain project leverages blockchain technology to ensure data integrity and transaction transparency, thereby bolstering public confidence in digital systems (DICT, 2024). The adoption of cloud-first policies consolidates information storage in secure, centralized government data centers.

Despite these gains, structural and political barriers continue to hinder comprehensive implementation. Persistent delays in procurement, overlapping mandates across agencies, and the politicization of digital initiatives have slowed progress. For instance, despite the issuance of over 84 million Digital National IDs, certain platforms remain underutilized due to inconsistent system integration and operational bottlenecks. Political commitment is evident in the PHP38.75 billion allocated in 2024 for digital infrastructure (Gita-Carlos, 2023), yet legislative inertia, bureaucratic resistance, and weak performance monitoring systems present serious obstacles to effective reform.

Ultimately, digital transformation is both a technical and political project. While the availability of infrastructure and platforms is essential, the human dimension—training, collaboration, and governance—plays a decisive role. As Villaseñor (2024) suggests, a national program should be institutionalized to capacitate digital frontliners, leveraging public-private partnerships, structured leadership training, and continuous learning. Only through such systemic support can digital governance be truly inclusive, resilient, and responsive.

The Philippine government's digitalization of frontline services represents a significant stride toward modernization and public accountability. Yet, its long-term success will hinge on addressing gaps in infrastructure, human resources, and inter-agency coordination. Empowering digital frontliners, streamlining institutional mechanisms, and ensuring political coherence are necessary steps to realize the promise of a digital state. In doing so, the Philippines can foster a more efficient, transparent, and equitable public service landscape for all citizens

References

- Addo, A. (2021). Controlling petty corruption in the public administrations of developing countries through digitalization. *The Information Society*, 37(2), 99–114. <https://doi.org/10.1080/01972243.2020.1870182>
- Alvarenga, A., Matos, F., Godina, R., & Matias, J. C. O. (2020). Digital transformation and knowledge management in the public sector. *Sustainability*, 12(14), 5824. <https://doi.org/10.3390/su12145824>
- Breit, E., Egeland, C., Loberg, I., & Røhnebæk, M. (2020). Digital coping: How frontline workers cope with digital service encounters. *Social Policy & Administration*, 55(5), 833–847. <https://doi.org/10.1111/spol.12664>
- Department of Information and Communications Technology. (2024). e-Government Transformation Report. [PowerPoint slides]
- Gita-Carlos. (2023). The government seeks P38.75B for digitalization efforts in 2024. Philippine News Agency.
- Villaseñor, R. A. M. (2024). The Public Service Digitalization in the Philippines: Towards a National Program to Capacitate Digital Frontliners. *Journal of Public Administration and Governance*, 14(2). <https://doi.org/10.5296/jpag.v14i2.22106>

ARTICLE DETAILS

EIR-0000043; Received: August 4, 2025; Accepted: August 6, 2025; Published: August 8, 2025

CITATION:

Caotivo J. (2025). *Efforts on Digitalization of Frontline Services in the Philippine Government Setting*. *Education and Industry Review: Essays and Critiques*. DOI: 10.62596/eir.4a9t8g56

COPYRIGHT

Copyright © 2025 by author(s). *Education and Industry Review: Essays and Critiques* is published by Stratworks Research Inc. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), allowing redistribution and reproduction in any format or medium, provided the original work is cited or recognized.