Digital Governance: Local Governments' Transformation Journey Towards Transparency, Accountability, Participation, and Equity (TAPE)

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Abstract

With technological advancements accelerating in the 21st century, local governments are challenged to strengthen their capacities in delivering basic services, planning, and policy-making decisions. The demands for local governments to promote the principles of transparency, accountability, participation, and equity (TAPE) with the use of technology are enormous, as citizens require innovation and agility.

This paper delves into the challenges local governments face in the digital age to promote further and operationalize the principles of TAPE. Likewise, the paper will explore how TAPE is influenced by technological advancements and how local governments improve their services, planning, and policy-making decisions while navigating such complexities. To give a clear perspective, the paper will do a descriptive analysis of different local government units based on a perception survey. The study employs the mixed method research design in looking at local governments' efforts in line with digital governance.

Keywords: Digital Governance, Local Governance, Transparency, Accountability, Participation, Equity, Digital Age, Technological Advancements

A. Introduction

Since the passage of the Local Government Code in 1991, local governments have enjoyed an autonomous status, a constitutional provision that ensures decentralization, democratization, and development. Numerous reform initiatives have been introduced through innovations to make services accessible to citizens. One in particular is information communication technologies (ICT), which led to digital governance (DG) towards transparency, accountability, participation, and equity (TAPE).

Given today's technological advancements, one of the most interesting focus areas is how local government units (LGUs) transformed themselves into ICT-capable entities by using tools like artificial intelligence (AI), the Internet of Things (IoT), virtual reality (VR), social media, and among others.

Looking at how digital governance evolved, its introduction in the 1990s gave rise to the term "digitization" which emerged from archiving physical documents into digital spaces (Scholl, 2020). The increase in digital innovation can be attributed to the birth of Gen Z when critical mass development of the Internet was coupled with the rise of the World Wide Web (WWW) and other Internet learning platforms. As such, government agencies have slowly transformed and integrated into digital platforms, making it more

convenient for them to reach stakeholders.

A significant rise in the use of digital or online services at the local level was seen during the COVID-19 pandemic. The shift to digital transactions was to the health guidelines mandated by the Department of Health (DOH) to limit physical contact and lessen the chance of infection among people. Local Government Units (LGUs) are to provide infrastructure that accepts digital transactions, thus the rise of contactless payments such as GCash, Maya (formerly Paymaya), and QR codes (DILG, 2020). In addition, LGUs migrated commonly used services such as applications for permits and licenses to be done online.

With the omnipresence of technology, some LGUs may have acquired the necessary capability depending on their financial capability and technological know-how. The city governments may have acquired a good extent of capability, and some big towns near the provincial or regional capital may have acquired some capability. However, smaller units such as second-class to sixth-class municipalities located in remote parts of the province or region—may only be beginning to be ICT-capable or may not even yet have taken the initial steps towards such direction because this involves adequate funding, costing, and training.

Thus, this paper delves into the (1) challenges faced by local governments in the digital age to further promote and operationalize the principles of TAPE; (2) how TAPE is influenced by technological advancements; (3) how local governments improve their services while navigating such complexities; and (4) descriptive analysis of different local governments digital reforms based on a perception survey.

Likewise, the paper introduces the experiences of the Philippines, particularly of local governments, in digital governance (DG) by harnessing the potential of ICTs. Most recommendations from the literature on establishing DG are taken from a generally Western-based knowledge perspective, with ICT being a Western technology. The paper, however, does not take the fast and rigorous means by which ICT is installed in developed countries; instead, it launches ICT initiatives in a "preparatory" manner, which fits the local Philippine context of doing things "slowly but surely." The preconditions for DG to grow in the Philippines are not the same as those in developed countries. In addition, the preconditions are hampered by traditional attitudes such as political apathy, which cannot be easily altered despite the knowledge of the benefits of DG.

DG specializes in understanding the administrative processes that are imperative in maximizing all means to deliver equitable services to the people through digital technology. In the context of ICT, DG ensures that digital transformation is utilized at the local levels of the government, targeting efficiency and effectiveness. On the other hand, Benjamin and Potts (2018) highlight the importance of organizationally-oriented understanding of DG wherein the role of an organization goes beyond accountability and decision-making. It incorporates the presence of a digital framework in the overall struc-

ture of the organization.

Meanwhile, the Organization for Economic Cooperation and Development (OECD) (2020) defines DG as the utilization of digital telecommunications as an integral part of the government's structure and operations. In short, digital government, according to the OECD, is the government's use of ICTs to create public value.

From the above definitions, DG may be defined, to suit the paper's purposes, as "the art and skill of managing the use of ICTs to enhance the delivery of public services of local governments to satisfied citizens (G2C), improve transactions with other government agencies to further their cooperation in data sharing (G2G), and open transactions with the business sector (G2B) to increase public sector transparency, accountability, participation, and equity". The last definition, recommended throughout the paper, already informs about DG's strengths.

Information and communication technologies (ICTs) enhance communication and streamline transactions for citizens (Aman, 2022), enabling them to apply for licenses, access public records, and utilize self-service processes from home or mobile devices. The digital transformation oversees accessibility by eliminating any "wastes" in terms of productivity such as long lines and bureaucratic paperwork. More so, DG emphasizes the term "collaboration" that understands the importance of partnerships between the government and its stakeholders in fostering local decision-making and the democratization of all of its processes (Pereira et al., 2017).

Zooming in on democratization, DG understands the role of transparency in holding public officials accountable in its continuous fight against corruption. It harnesses its core of delivering equitable access to public services and making it suitable to the needs and context of the communities. However, within the Philippine context, there is a need to sustain digital governance as a focal point to boost economic development. In fact, in many local award indicators, DG is implicitly a criterion, e.g., Competitiveness of Cities and Municipalities Index (CCMI) and Most Business Friendly LGUs.

In its essence, DG must be dissected into two points: digitalization and e-government. The former focuses on the government's initiatives to revitalize its programs and integrate digital transformation into its services. It also inculcates digital plans and policies to the state's projects (Umbach & Tkalec, 2022). On the other hand, the latter integrates the use of public delivery information and services and engages people in public affairs through policies, people, processes, and technologies.

B. Challenges Faced by Local Governments in the Philippines in the Digital Age to Further Promote and Operationalize TAPE

In the Philippine context, DG has been beneficial to many local governments. As seen in Table 1, the country has 82 provinces, 149 cities, 1,493 municipalities, and 42,004 barangays (lowest level), which means that with huge local government units, the require-

ment to capacitate them is challenging (DILG, 2024). However, with the assistance of the Department of Interior and Local Government (DILG) and the Department of Information, Communication, and Technology (DICT), many LGUs have integrated ICT capabilities and solutions in their unit.

As the lead agency for supervising local governments, DILG spearheaded the capacity-building for LGUs to practice governance excellence through ICT in streamlining systems, processes, and procedures, particularly in issuing business licensing and permits. This is referred to as the Business Licensing and Permits System (BPLS) which some local governments improved to an online platform which is the Electronic Business Permits and Licensing System (eBPLS). Under the Roadmap to Smarter LGUs, in partnership with the Department of Information and Communication Technology (DICT), Union of Local Authorities of the Philippines (ULAP), National ICT Confederation of the Philippines (NCIP), USAID, Microsoft Philippines, and other partners, the DILG led LGUs to make public services innovative, convenient, and faster for the citizens. This is considered as one of the government's thrusts to improve the country's ease of doing business and competitiveness.

Table 1: Regional and Provincial Summary Number of Provinces, Cities, Municipalities, and Barangays as of June 30, 2024,[2]

RegProvMunBgy	REGION	PROV.	CITIES	MUN.	BRGYS.
1300000000	NCR (NATIONAL CAPITAL REGION)	-	16	1	1,710
1400000000	CAR (CORDILLERA ADMINISTRATIVE REGION)	6	2	75	1,178
0100000000	I (ILOCOS REGION)	4	9	116	3,267
0200000000	II (CAGAYAN VALLEY)	5	4	89	2,311
0300000000	III (CENTRAL LUZON)	7	15	115	3,105
0400000000	IV-A (CALABARZON)	5	22	120	3,993
1700000000	MIMAROPA	5	2	71	1,460
0500000000	V (BICOL REGION)	6	7	107	3,471
0600000000	VI (WESTERN VISAYAS)	5	3	98	3,389
1800000000	NIR (NEGROS ISLAND REGION)	3	19	44	1,353
0700000000	VII (CENTRAL VISAYAS)	2	10	91	2,312
0800000000	VIII (EASTERN VISAYAS)	6	7	136	4,365
0900000000	IX (ZAMBOANGA PENINSULA)	3	5	67	1,904
1000000000	X (NORTHERN MINDANAO)	5	9	84	2,022
1100000000	XI (DAVAO REGION)	5	6	43	1,162
1200000000	XII (SOCCSKSARGEN)	4	4	45	1,096
1600000000	XIII (CARAGA)	5	6	67	1,311
1900000000	BARMM (BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO)	6	3	124	2,595
	TOTAL	82	149	1,493	42,004

The very objective of the said initiative is to promote awareness among LGUs and their stakeholders to further improve their competitiveness towards a more efficient processing of local government documents, particularly permits, and licenses. Some of the LGUs that have promoted their best practices using ICT platforms in public service

delivery include Quezon City's e-payment System, Valenzuela City's Automated 3S+ System for construction and building permits, Marikina City's business portal, San Fernando's La Union ITMS, Legazpi City's Balangay Model, and Makati Zen. The purpose is to serve their constituents better and make them business-friendly yet competitive with other LGUs. Given the digital governance direction of the Philippine Government, there are numerous smarter local governments at the provincial, city, and municipal levels that have adopted ICT in the governance process. This means that the focus of the government is to ensure seamless transactions with the use of technology. In particular, local governments are now into e-Business Permits and Licensing Systems (eBPLS). However, several LGUs also encounter problems with their implementation of eBPLS due to low bandwidth subscription, slow internet connectivity, complexity, variations in the business rules of LGUs, no plantilla for ICT personnel, and lack of ICT resources.

To address such issues on eBPLS, particularly on no Plantilla for ICT personnel there are pending legislative measures at the Philippine Congress - one is House Bill No. 8520 filed in the 19th Congress titled "An act creating mandatory positions for a Human Resource Management Officer and Business Permit Licensing Officer for municipalities, cities, and, provinces, amending certain provisions of the Local Government Code. Another one is Senate Bill No. 1278, titled "An Act Establishing a Business Permit and Licensing Office (BPLO) in Every City or Municipality in the Country.

As it aims to promote the principle of social equity where everyone has access to government services everywhere, there are continuing challenges at the surface as to why only several cities have embraced the use of eBPLS to streamline their business processes online to make it friendly to the citizens with automated workflows and online payment ensuring that transparency, accountability, participation, and equity are promoted. The lack of BPLO and eBPLO is due to some challenges attributed to the failure of its non-establishment: (1) non-institutionalization of BPLOs, (2) lack of a regular plantilla personnel position to serve as Business Permit and License Officer, (3) lack of competent and skilled personnel to operate the business and permits and licensing system, and (4) political dynamics which involve spoils system and corruption.

Why does this pose a challenge in the digital age to promote TAPE? The establishment of digital Business Permits and Licensing Offices ensures the ease of doing business, especially at the local level, e.g. prompt issuance and renewal of business permits, and payment of taxes and fees. It also guarantees that local government policies are data-driven, future-proof, technology-enabled, and aligned with strategic investments made by the private sector.

Likewise, local government units encounter several challenges towards transparency, accountability, participation, and equity in the digital governance era. These include: (1) budget constraints as digital infrastructure requires vast amounts of capital and investment, (2) inadequate technological infrastructure where majority of local governments are in farflung areas with limited to no access to electricity, widening the gap of

the digital divide, (3) concerns on data privacy and protection, particularly on the impacts of cybersecurity threats, (4) changing of mindsets wherein citizens and providers are skeptical to change and the use of digital tools, which leads to skills gap of both providers and users of new technologies (5) limited policies and regulations that may not support digital innovations and the lack of clear guidelines that may be insufficient for implementing digital solutions leading to inconsistencies, (6) the need to strengthen collaboration and partnership among various levels of government, private sector, and other digital providers.

C. Technological Advancement' Influence in Promoting TAPE

Technology has greatly influenced service delivery at the local level towards national development, particularly in the ease of doing business. But how do these developments make sense in advancing transparency, accountability, participation, and equity (TAPE)? Before looking at the local level, it is appropriate to look at the performance of the Philippines when it comes to the global digital competitiveness index. According to the World Digital Competitiveness Ranking, the Philippines ranked 59th out of 64 economies, the lowest ranking since 2017 and also the lowest in the Asia-Pacific region at 13th place (Tabile, 2023). As the country is lagging, there is so much for the Philippine government to work on. In short, digital transformation should be a public sector imperative. The question then to ask is: how do we, or our governments, approach digital transformation? How do we approach digital transformation so that we can at least improve our ranking? How do we proceed?

Well, advice on the "hows" are myriad in the literature. Given the emerging, rapidly changing, and therefore fluid state of smart technologies, we in the public sector can only become smart by looking at the most recent developments, by looking at the situation and by learning much from what is available as best practices. It is opportune then to make use of these multiple pieces of advice so that our governments may be able to prioritize activities that could pave the way towards public sector digital transformation on a level and scale as in the private sector.

1. Governance is a significant indicator for us in the public sector.

Governance tells us that a country's network readiness is a function of the national government within which people operate. The NRI of Portulan's Institute tells us further to look at three indicators of the conduciveness of the national environment to be able to attain digital transformation. These three indicators are trust, regulation, and inclusion.

Trust as the first indicator measures how safe individuals and organizations are in the context of the network economy. Are our governments providing a national environment perceived as safe and trustworthy by the public? Economics Observatory (2022) tells us that we need to gain the trusting behavior of the public. For example, are internet servers secure, that is, do they use encryption technology in internet transactions? Has this been done? To what extent? Also, what is the level of cybersecurity commitments of the government? For trust, the Philippines ranked 51st (DICT, 2024).

Regulation, as the second indicator, measures the extent to which the government promotes participation in the network economy through regulation. Regulation is examined in terms of regulatory quality, the ICT regulatory environment, as well as the legal frameworks' adaptability to emerging technologies. Regulatory quality is extracted from perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Has the government implemented sound policies and regulations to ensure people's participation in the network economy? Also, how adequately is the legal framework adapting to Artificial Intelligence (AI), Robotics, Big Data Analytics, and Cloud Computing? For regulation, the Philippines is the lowest in the Southeast Asia with a rating of 35.7% (BusinessWorld, 2023).

Inclusion is the extent to which the country addresses issues such as inequality based on gender, disabilities, and socioeconomic status. For example, has the government provided e-participation? E-participation refers to the quality, relevance, and usefulness of government websites in providing online information and participatory tools and services to its citizens. E-participation also refers to the capacity and willingness of the government to encourage citizens to practice deliberative and participatory decision-making in public policy. Has the government done this?

One indicator of inclusion in which the Philippines ranked very low (126th) is a socio-economic gap in the use of digital payments (NRI, 2022). Governments must then see to it that there is equality among social groups in the use of digital payments.

2. What Digital Transformation Can Do?

This is a second piece of advice, which describes what digital transformation can do. By naming these benefits, our governments are informed what to do and what not to do. For example, our governments are told that digital transformation can be a good tool to allow countries, cities, corporations, and individuals to build a better future. However, if unchecked and left to the spontaneous forces of the market, it may lead to the opposite outcome. Rebalancing technological and human aspects of digital transformation is hence a tall agenda for all of us.

How is digital transformation impacting global and local inequality? In 2023, about 66.2 percent of the global population owned a mobile phone, and a little more than 55 percent of the global population was connected to the Internet. In 2020, the Philippines has accumulated 56.1% or 14,794,590 households of the population have access to the internet (Philippine Statistics Authority, 2022). While there is an increasing trend for accessibility to the Internet, government institutions have to explore methods as to how their services can be easily accessed through digital platforms.

Divides also exist regarding the quality of technology being accessed—such as the bandwidth of broadband connectivity. Social equity comes in in this kind of scenario. There are fears that high-income economies with more skills and greater access to re-

sources may be able to leverage better technology to create more economic value at a faster rate than low-income nations that have access to some technology (but not the best), have limited skills, and access to fewer resources. This will in turn increase the wealth gap and make the world a more unequal place. While the recent trends regarding inequality are mixed—increasing in some places (typically advanced industrial nations) and decreasing in others—the question of whether increased digital transformation will increase inequality over time remains an important question for governments to ponder.

One question to ask - Is digital transformation leading to better lives? - informs us how agile governments must use digital transformation. We are seeing an undeniable increase in the ease with which we can search for a restaurant, make a hotel reservation, buy a book online, or run a video call across multiple parties. All of these conveniences have helped to make our lives so much better (at least those of us who have access to the Internet).

However, these benefits are balanced by a growing concern about whether digital technologies are ultimately leading to better lives for us. Questions are being raised about the nature of jobs being created, with most employees working part-time, without contract, without health benefits, and often at or close to minimum wage. Many workers have a hard time saving for buying a home or paying for their children's education. With ubiquitous technology, employers can monitor minute details of their employees' behaviors and reward or penalize them accordingly. This shows that digital transformation does not necessarily lead to better lives.

Another question - Are we controlled or being controlled by technology? Recent controversies have brought into focus how much data is being harvested by digital companies and how all this data can be so easily mined and used for the wrong purposes. Personal data is being harvested, mined, and in some cases sold by digital companies, all without our explicit knowledge or permission. In most cases, we are helpless participants who are resigned to the loss of personal privacy in our digital lives. Further, the progress of AI over the last decade has instilled a deeper existential fear in the minds of many. AI has reached or surpassed the levels of performance of human experts in some fields, and it is approaching human-level performance in many others. Studies are showing significant proportions of jobs in many sectors are at risk of being taken over by intelligent machines.

One benefit of digital transformation is that it can help in the faster implementation of the Sustainable Development Goals (SDGs). All the 17 UN SDGs adopted in 2015 can be accelerated through the adequate use of digital technology. A truly planetary digital transformation would strive to end poverty and inequality, tackle climate change and environmental degradation, and strive for peace and justice. This strong connection between digital transformation as a tool to accelerate the realization of SDGs is further underlined in the NRI, 2020 by making explicit the SDGs where ICTs have the most

impact.

3. Best Practices in the Private Sector

Governance requires more coordination when making decisions and conducting actions. Questions are not local but global, including all countries. Governance mechanisms implemented by companies around their digital initiatives have several impacts on the lives of the citizens. Many mechanisms are used to improve their digital governance capabilities. In the case of the Philippines, the private sector is being looked at as a model when it comes to digital governance. At present, various platforms are provided to the government for the efficient delivery of services, e.g. e-payment systems, online transactions, online public grievances, access to public documents through freedom of information (FOI), and online consultations for government programs and policies.

4. How about Leadership?

The implementation of digital technologies in public agencies must start with top leaders who recognize their importance for economic and social efficiency. These technologies enhance information management, addressing geographic challenges and enabling faster decision-making. Under President Ferdinand R. Marcos Jr., plans for digital transformation include a 61% budget increase for 2024, emphasizing digitalization as a priority. Effective leadership is crucial, requiring leaders to communicate a clear vision and model the desired behaviors to inspire change. Cultivating a culture of openness and trust fosters engagement and adaptability, helping teams thrive in a digital landscape. As we all know, leadership is a classic handle in any reform initiatives being introduced. In fact, DICT is spearheading the creation of many digital platforms useful for LGUs, and many local chief executives have introduced digital governance reform initiatives as shown in Table 3.

D. How Local Governments Improve their Services?

LGUs are vital in the country's national development. It exists to directly cater to the needs of the communities as well as their varying challenges. As such, the integration of digital governance can be seen as a vantage point for leaders to industrialize their processes and understand how these can further advance TAPE that drives citizen engagement and participation towards consultative and data-driven policies.

The participation of the people in policymaking can be seen as a personalized approach to the government's response which prompts a "citizen-first" mindset in its brand of leadership. However, this can only be done if the local government utilizes digital governance to understand its constituents better. Through a collaborative approach coupled with advanced and data-driven policymaking, this can easily optimize local development plans for improved service delivery and context-based support (Daniel, 2020).

During the COVID-19 pandemic, LGUs were one of the frontliners who adaptively responded to the crisis by maximizing their digital services (Roseth et al., 2021). With the continuous innovations in streamlining the delivery of necessities, they have come

up with an analysis of utilizing new service models that aim to incorporate digital transformation. However, with the limited resources available, financial allocation remains to be a challenge that they need to face. According to the Presidential Communications Office (2023), one of the government's priority agenda for the years to come is to introduce a comprehensive digital roadmap that will track the state's actions in its campaign for digital transformation. This includes revamping access to digital financing as well as utilizing analytics and tools to combat graft and corruption.

Aside from streamlining digital services, there is also a greater demand for the LGUs to adopt and replicate the idea of Smart Cities, which have been a starting point for other countries to conduct digital transformation. In a policy note written by Ramos et al. (2022), they emphasized some initiatives of different cities prioritizing the establishment of smart cities. However, there have been contentions when it comes to funding and infrastructure. The availability of high-tech ICT devices remains the biggest issue, coupled with policy lobbying from various government agencies. Nonetheless, there have been explorations to evolve from naming it as a "smart city" to a "digital city" and "intelligent city" (Ramos et al., 2022). On the same note, the study of Basilio and Rivera (2021) formulated a "localized definition of a smart city for the Philippines based on the ASEAN Smart City Network (ASCN). The study defined a smart city as the integration of technological, economic, social, environmental, and political factors with the local development planning process to improve the citizens' quality of life while ensuring inclusivity and sustainability. The study also showed how the smart city approach can be easily integrated into the local planning development framework.

Notably, the Philippine public sector has introduced a good record when it comes to digital transformation, as shown in Tables 2 and 3. These are just some of the digital reform initiatives at the national and local levels.

Furthermore, national and local governments can maximize the use of technology through these four areas - (1) institutions/systems/processes; (2) mindsets and behaviors; (3) citizen participation; and (4) phronetic leadership under the Governance Reform Framework (Figure 1) to enhance and promote transparency, accountability, participation, and equity.

The GRF talks about how TAPE will be operationalized and achieved as a vision by considering the essential quadrants. The first quadrant articulates an institution, systems, and processes to be people-centered when it comes to its policies and plans supported by evidence-based policies through data that maximizes the use of technology. Equally important are the mindsets and behaviors of leaders and their implementers, wherein they should be values-driven within the heartbeat of times. Working in the government is all about public service, wherein public servants must, at the same time, understand the future. The third quadrant is about genuine citizen participation, which means inclusive, meaningful, and responsive, while the fourth quadrant is on a classic handle, which is leadership but, in particular, phronetic, which is all about practical wis-

Table 2: Digital Reform Initiatives in the Philippines at the National Level as of 2024

National Agencies	Digital Transformation Initiatives
Bureau of Internal Revenue	e-Registration of BIR membership
Social Security System	My.SSS integration with the ease of access to digital payments for monthly contributions and benefits
Pag-IBIG	Online application for monthly contribution payments
National Bureau of Investigation (NBI)	Online integration for NBI clearance
Department of Foreign Affairs (DFA)	DFA Online Passport Assignment
Philippine Statistics Authority (PSA)	Online integration of Appointment for PSA
Presidential Communications Office (PCO)	Freedom of Information Requesting System
Department of Information and Communication Technology (DICT)	Integration of e-Travel, eGov PH Super App, eLGU, and e-Report

Source: Department of Information and Communication Technology, 2023

Table 3: Digital Reform Initiatives in the Philippine at the Local Level

Local Government Agencies	Digital Transformation Initiatives
Alaminos City	Barangay Health Worker Information System and Quezon City's QC eServices
Makati City	Unified ID for Makatizens. Cashless Transactions, Anytime
Quezon City	Civil Registry Service Digitalization
Valenzuela City	Val-U Electronic Certificate of Final Electrical Inspection and VSpace: Online Booking and Reservation System
Mandaue City	CITYMAP: Guiding the City towards Growth, Innovation and Economic Resiliency
Bogo City	Go Digital! Go Smart!
Mina, Iloilo	Municipal Learners Monitoring System (MLMS)
Davao de Oro Province	Enterprise Feedback Management System

Source: Department of Information and Communication Technology, 2023

dom that is equivalent to wise or ethical leadership used in co-creating knowledge towards the common good.

Figure 1: Governance Reform Framework 6.0 (GRF)
Source: **(Brillantes, Calina, and Domingo, 2022)**

E. Descriptive Analysis of Different Local Governments' Digital reforms Based on Perception Survey

The survey was administered via Google Forms, a method that introduces certain limitations. Given that this study did not utilize a probability sampling technique, the findings cannot be considered representative of the broader population. The sample is likely to be biased toward individuals with access to the internet, as the survey was conducted online, thus excluding those without internet access. This limitation constrains the ability to generalize the results to the entire population. Therefore, the conclusions drawn from this study are limited to the characteristics of the respondents and no broader inferences about the population can be made.

Geographically, the sample is concentrated in urban areas, with 38.7% of respondents residing in Makati City, followed by 17.9% in Valenzuela City, and 12.3% in Bacolod City. Smaller proportions of respondents come from Quezon City (11.3%) and other cities, including Davao and Tuguegarao. The predominance of urban respondents may influence the responses, particularly in the context of digital governance and access to online services, highlighting the potential bias toward individuals in more developed, digitally connected regions.

The perception survey looks into five objectives such as awareness, effectiveness, security, usability, and engagement. The discussion below articulates the results of the perception survey.

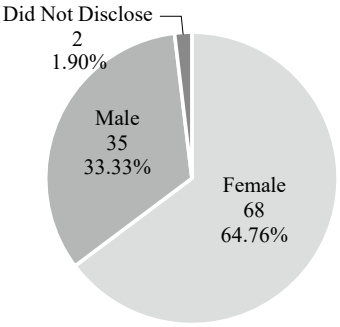

Figure 2: Distribution of Survey Respondents by Sex

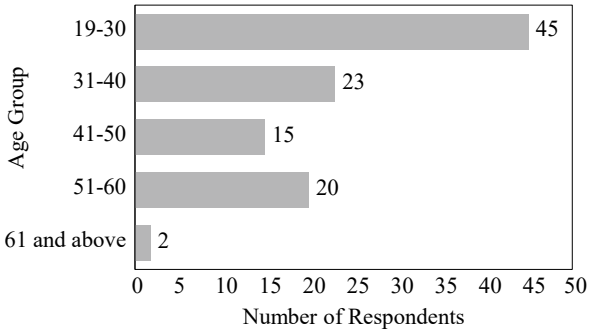

Figure 3: Survey Respondents by Age Group

Objective 1: Awareness

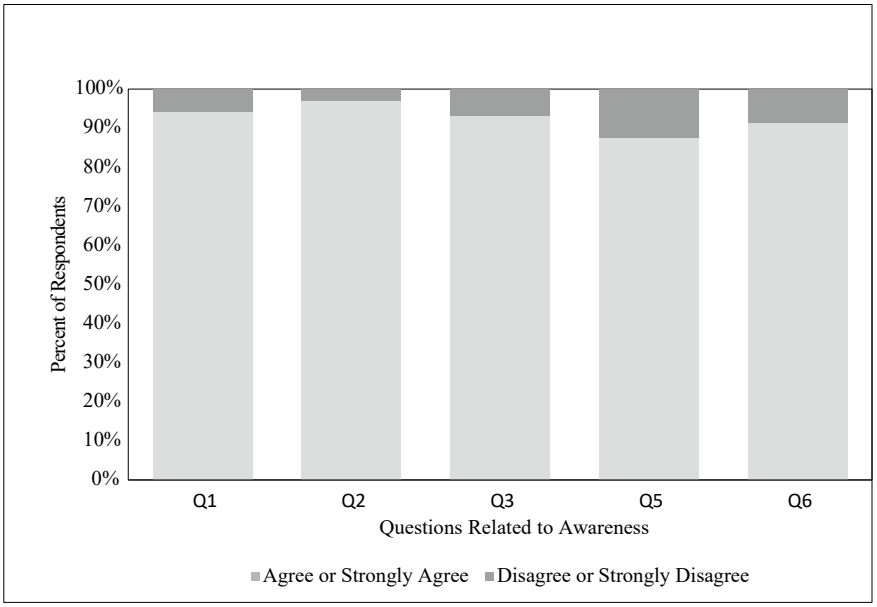

Figure 4: Distribution of Public Perception of Local Government Digital Services (Awareness)

For questions 1, 2, 3, 5, and 6, most respondents expressed positive views, with high percentages (more than 87% in all questions) agreeing or strongly agreeing with the statements. These results suggest a strong overall awareness with local government services and digitization effort.

Objective 2: Effectiveness

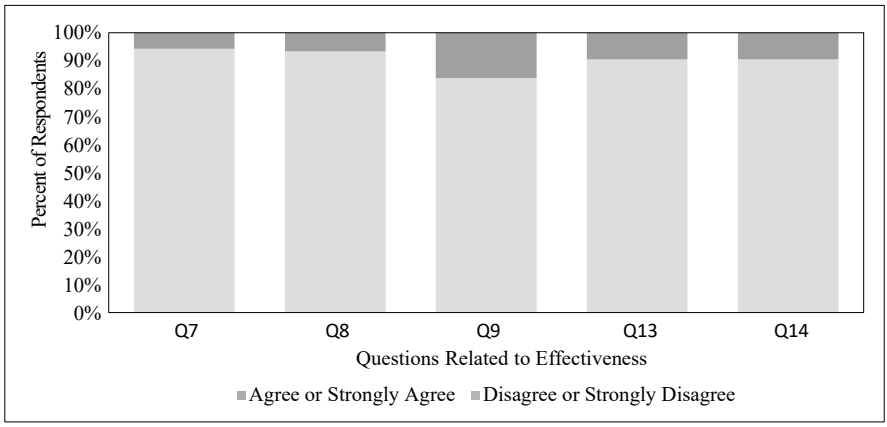

Figure 5: Distribution of Public Perception of Local Government Digital Services (Effectiveness)

For questions 7, 8, 9, 13, and 14, the responses indicate a generally positive outlook on the effectiveness and usability of local government digital services. While the majority of the respondents (at least 90%) are satisfied with the effectiveness, accessibility, and usability of digital services, question 9 indicates a slightly lower satisfaction (about 84%) with online services compared to other aspects evaluated.

Objective 3: Security

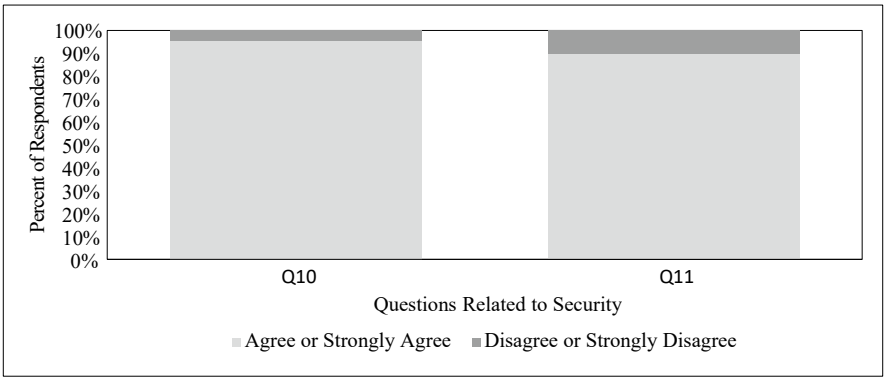

Figure 6: Distribution of Public Perception of Local Government Digital Services (Security)

For questions 10 and 11, which focus on security and data protection, the responses reflect strong confidence in the adherence to privacy measures by local governments. The results indicate that most respondents feel secure when using their local government's online services, though there is slightly less confidence in specific safety measures (90%) compared to overall privacy law adherence (95%).

Objective 4: Usability

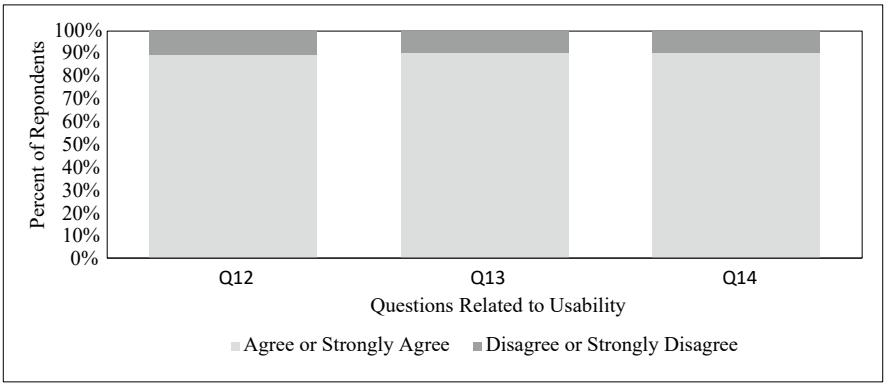

Figure 7: Distribution of Public Perception of Local Government Digital Services (Usability)

For questions 12, 13, and 14, which focus on the usability and adaptability of local government websites, the responses show a generally positive view. The responses suggest that the majority of users are satisfied with the functionality and relevance of the local government websites with high ratings (91%) for ease of navigation and adaptability to local needs.

Objective 5: Engagement

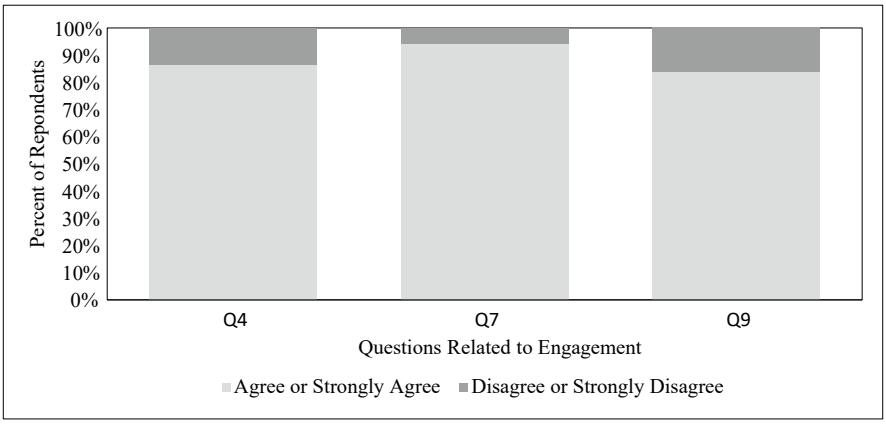

Figure 8: Distribution of Public Perception of Local Government Digital Services (Engagement)

For questions 4, 7, and 9, which focus on the timeliness, effectiveness, and satisfaction with online services, the responses reveal positive feedback but with some variations in satisfaction levels: 87% agree or strongly agree that the website provides an updated and on-time delivery of online services, 94% believe that the digitization process has been effective in providing efficient services, and 84% are satisfied with the online

services offered by their local government, showing lowest satisfaction among questions related to engagement. While effectiveness and timeliness are rated highly, satisfaction with the online services (question 9) shows a slightly lower percentage, indicating a room for improvement in meeting public expectations.

In general, the high level of awareness when it comes to Digital Governance (DG) indicates a strong understanding of its benefits. Likewise, accessibility to digital services creates a holistic overview of its effectiveness in streamlining DG in more usable and adaptive to the growing needs of the LGUs.

F. Conclusions

Digital transformation as a public sector initiative in promoting transparency, accountability, participation, and equity (TAPE) is imperative. Digital governance should not be left to chance. Governance requires conscious design and engagement by the organization's most senior executives. No governance model is optimal for all agencies in the public sector. The right governance model provides appropriate levels of coordination and sharing for digital initiatives, in line with the organization's structure, culture, and strategic priorities.

The perception survey on digital reforms in the Philippine government highlights a promising landscape of awareness and satisfaction among urban respondents regarding local government digital services. With a substantial majority expressing positive views—over 87% in key areas such as awareness, effectiveness, and usability—it is clear that the digitization efforts are resonating well, particularly in urban areas like Makati, Valenzuela, and Bacolod.

While the overall sentiment is favorable, certain nuances emerge from the data. There is a notable decrease in satisfaction with online services which suggests opportunities for improvement. This indicates that while citizens recognize the efforts made, there remains a gap in fully meeting their expectations for online service delivery. Additionally, although there is strong confidence in security measures, the variations in responses regarding specific safety concerns call for ongoing attention to data protection protocols.

The predominance of urban respondents may skew the findings, as those in less developed areas might experience different challenges and perceptions regarding digital governance. Therefore, as the government constitutes campaigns for digital reforms, it should also strive to inculcate citizen participation and engagement that aim to reach the marginalized sectors in different communities. This will boost the public's trust while providing reassurance to the effectiveness of digital services.

As such, the heads of agencies are the leaders in governance dealing with digital transformation. They should plan to revisit their governance models periodically. They can understand when it is time to adjust their governance models by paying attention

to the behaviors governance is intended to enhance, and adjusting governance to encourage new behaviors. As coordination and sharing become part of the culture, some governance mechanisms may become redundant. Competitive changes can also require companies to change their extent of centralized control. When it comes to governance, no governance model is ideal for all. However, creating and evolving digital governance is essential to help the organization thrive and succeed in its goal for public services in a digitally transformed world.

Notes

1 Dean of the Graduate School of Public and Development Management, Development Academy of the Philippines, President of the Philippine Society for Public Administration and Philippine Futures Thinking Society, and Treasurer of the Asian Association of Public Administration. Grateful for the research assistance of Joseph Sean Eli S. Limbaga, Andrea Francesca S. Camago, and Jesson E. Ordaneza.

2 Regional summary of the number of provinces, cities, municipalities, and barangays as of June 30, 2024

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