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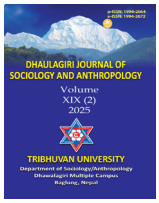

From Policy to Practice: The State of E-Governance in Nepal

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Abstract

E-Governance has emerged as a transformative tool to enhance democratic governance, transparency, accountability, and inclusive service delivery. This paper critically examines the evolution, status, challenges, and opportunities of e-governance in Nepal, drawing on policy documents, academic literature, and reports from bilateral agencies and civil society organizations. The study assesses how digital governance initiatives, such as the e-Government Master Plan 2006, the Digital Nepal Framework 2019, and the 16th Five-Year Plan, have shaped the country's digital trajectory. While significant progress has been made in digital service adoption and citizen engagement, strengthened by expanding telecom infrastructure and the COVID-19 pandemic, Nepal's E-Governance landscape remains constrained by inadequate human capital, digital divides, weak political will, poor implementation mechanisms, and infrastructural deficits. This review aims to contribute to ongoing discourse by identifying policy gaps, stakeholder engagement needs, and strategies to mainstream E-Governance into Nepal's democratic and socio-economic development processes. This study employs a desk review methodology to synthesize diverse secondary sources and examine the existing policy framework on e-governance in Nepal. The findings show significant progress through initiatives such as the e-Government Master Plan, the Digital Nepal Framework, and expanded digital service delivery across the country. However, full implementation remains constrained by digital divides, weak infrastructure, socio-political barriers, limited skilled human resources, and low public awareness. Finally, this article underscores the potential of E-Governance to catalyze inclusive development and democratic deepening in Nepal.

Keywords: accountability, democracy, digital, e-governance, inclusion

Introduction

Nepal's overall telecommunication service availability is remarkable, with telephony subscription (fixed and mobile voice) at 141.44% and Broadband Internet penetration (fixed and mobile) at 131.51% as of January 14, 2023 (Nepali Telecom, 2023). Nepal's E-Government Development Index (EGDI) is 0.5781, ranking the country 119th globally in 2024 (United Nations, 2024). This comes in part from the worldwide digitalization of governance and in part from citizens' digital expectations, their right to governance, and their access to information. In this regard, the Government of Nepal has introduced several policies over the past couple of decades that have the potential to transform the E-Governance sector in Nepal. The use of

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Information and Communication Technology (ICTs) in the public service delivery was formalized by the formulation of the e-Government Master Plan 2006 by the GoN (Government of Nepal, 2015). Department of Information Technology formulated another e-Government Master Plan Called E-Governance Master Plan (2015-2019 AD) (Government of Nepal, 2015), but it has not been formally approved by any authority. The Digital Nepal Framework, approved by the GoN in 2019 (Government of Nepal, 2019), identifies eight broad sectors and 80 initiatives that focus on digital transformation across these sectors. The diffusion of digital technologies is a powerful aspect for digital government initiatives. This is expected to mark a transition in service delivery in Nepal from a traditional grant-recipient relationship to citizen-driven service delivery processes. The transformation, if realized, will lay the foundation for good governance, ensuring inclusive and participatory democracy, corruption control, and socioeconomic development.

E-governance is defined as the use of ICT by government institutions to foster citizen engagement, deliver services, and promote transparency and accountability (UN, 2020).

E-governance leads to increased civic engagement, transparency, accountability, and efficiency in public-sector governance, thereby advancing socio-economic progress. These technologies provide accessibility to online content and services while offering the public an active voice in governmental issues (Baum & Mahizhnan, 2014). It enables governmental and private organizations to adopt information and communication technologies to, among other things, upgrade their internal communication mechanisms (de Vries, van den Hooff, & de Ridder, 2006), be more accessible to external entities (Winthereik & Vikkelsø, 2005) and develop novel procedures to manage the organizational knowledge based on the creative capabilities of ICTs (de Vries, van den Hooff, & de Ridder, 2006). This allows for greater public participation and creates adequate spaces for transparency, with significant potential to curb corruption.

Furthermore, Meneklis (2014) argues that ICT is an important tool for citizen empowerment and makes government management more efficient. According to them, it also supports increased transparency, revenue growth, corruption control, and cost minimization. As a result, e-governance technology can prove the means to ensure governance through accountable, effective, efficient, participatory, transparent, responsive, equitable, and inclusive, and the rule of law.

E-Governance plays a vital role in enhancing government transparency, efficiency, citizen engagement, and cost savings. By providing accessible online portals, it increases transparency, allowing citizens to better understand government processes such as budgets and policies. Streamlining tasks like permit applications through digital systems improves government efficiency and reduces bureaucracy. E-governance also boosts citizen engagement by offering online platforms for feedback and participation in decision-making. Additionally, it leads to cost savings by reducing the need for paper-based processes and physical infrastructure (Jopang et al., 2024).

In this context, this paper explores the evolution of e-governance in Nepal, focusing on its progress, challenges, and opportunities for enhancing the country's governance system. The use of ICT to improve government services has the potential to significantly transform the administrative and political landscape of Nepal. While digital tools have been integrated into national policies, the shift from policy to practice has faced several barriers, such as limited infrastructure, digital literacy gaps, and resistance within governmental institutions. This paper tries to address these challenges while examining the broader potential of e-governance in Nepal. The main research question guiding this study is how effective the implementation of e-governance has been in Nepal, and what the key challenges and opportunities are in moving from policy to practice. The key objective of this study is to analyze the e-governance policies and evaluate the technical, institutional, and socio-economic barriers that impede the effective e-governance in Nepal.

The study also emphasizes the emerging opportunities for Nepal to leverage technology in ways that can bridge gaps in service delivery, promote inclusivity, and foster better governance for the future.

Methodology

This research adopts a desk review methodology as its foundational approach to evaluate the e-governance landscape of Nepal. The desk review method was selected for its capacity to consolidate diverse secondary sources and generate a comprehensive understanding of the existing policy framework, implementation status, and challenges related to e-governance. It enables the identification of both structural and operational gaps, highlighting what has been done, what remains unaddressed, and the factors that have hindered the realization of intended outcomes. The goal was to provide a clear assessment of progress made, challenges faced, and potential opportunities to advance digital governance in Nepal. The desk review drew on three broad categories of secondary resources: government policies, academic literature, and gray literature. In the first category, a detailed analysis of national policy documents and legal instruments was conducted. These include, but are not limited to, the E-Government Master Plan Consulting document, the E-Governance Master Plan (2015–2019), the ICT Policy 2072, IT Policy 2057, the 2019 Digital Nepal Framework, the National Information and Communication Technology Policy, and regulatory documents such as the Telecommunications Act and Regulation (1997), Telecommunication Policy (2004), Spectrum Policy (2013), and Broadband Policy (2015).

In the second category, the review incorporated

academic literature on ICT, e-governance, and related socio-political themes. Specific focus was given to publications that explore the intersection of technology with gender, social inclusion, participation, accountability, and transparency.

The third category of sources included gray literature, which consisted of reports and publications produced by development agencies, along with media coverage reflecting the on-the-ground status of e-governance in Nepal.

The data collected were analyzed using qualitative techniques focused on consistency, relevance, and corroboration. A simple process of pattern-matching and categorization was used to group data into thematic areas such as policy formulation, institutional coordination, implementation bottlenecks, and inclusion dynamics. This analytical approach ensured that the review findings are both reliable and aligned with the objectives of the study to bridge the gap between policy intent and practice in Nepal's e-governance domain.

The researchers used purposive sampling to select the literature, focusing on government policy documents, journal articles, national ICT strategies, and relevant reports. Secondary data were organized through a thematic classification process. For this, first, the researcher identified broad themes like policy evolution, institutional readiness, digital infrastructure, service delivery, and citizen adoption; second, within each theme, the researcher grouped sub-themes like legal frameworks, digital literacy, and capacity gaps. For data analysis, the researcher employed qualitative content analysis, using iterative coding to identify patterns, comparing policy intentions with implementation realities, and synthesizing insights across multiple sources. This analytical approach allowed researchers to systematically interpret the evidence and understand the gap between policy and practice of the e-governance landscape in Nepal.

Existing E-governance Initiatives

The Government of Nepal launched the e-Government Master Plan in 2006, which outlined a comprehensive strategy for the use of IT in government services. The plan has been implemented in phases, and the government has made significant progress in using IT to improve the delivery of government services. Building on this work, the Government of Nepal launched the Digital Nepal Framework initiative in 2019 to transform Nepal into a digital society by 2025 (Government of Nepal, 2019). This framework defines a series of goals: first, improving the efficiency and effectiveness of government services; second, creating new opportunities for economic growth and development; third, improving the quality of life for citizens; and finally, making Nepal a more attractive destination for investment and tourism. The Framework encompasses: One Nation, Eight Sectors, 80 Digital Initiatives, and a blueprint that provides a roadmap of digital initiatives for economic growth. The framework identifies a few digital initiatives across the eight sectors, presented in Table 1.

Nepal's digital transformation efforts span across multiple key sectors, beginning with the establishment of a robust digital foundation. This includes nationwide deployment of high-speed internet, 5G networks, fiber optics, public Wi-Fi, and digital identity systems such as biometric ID cards and digital signatures. E-governance is being promoted through tools like the Government of Nepal App and a shift toward paperless administration. There are also initiatives for cybersecurity, digital innovation hubs, and ICT skill development. In the agriculture sector, digital initiatives aim to modernize farming through platforms such as e-Haat Bazaar, smart irrigation, land digitization, precision agriculture, and digital subsidy disbursement. Education and knowledge-sharing centers, tele-veterinary services, and product quality tracking systems are also being established to enhance productivity and access.

In health sector, the government is rolling out electronic health records, centralized telemedicine, and mobile health units. In contrast, the education sector is being transformed with biometric attendance systems, online platforms, rural mobile learning, and smart classrooms. The energy sector includes smart metering, mobile service apps, energy management systems, and GIS-based grid modernization. Tourism is benefiting from digital enhancements like AR/VR tours, multilingual helplines, e-visas, and improved tourist security. In finance, Nepal is promoting digital payments, mobile wallets, national payment gateways, and e-commerce ecosystems. Finally, urban infrastructure is being digitized with smart water metering, intelligent waste and traffic management, mobile applications for municipal services, and national disaster management systems, making cities more efficient and resilient.

Likewise, the National ICT Policy was promulgated in 2015 with the vision: "To transform Nepal into an information and knowledge-based society and economy." (Ministry of Information and Communication, 2015). This policy envisioned "Digital Nepal". Similarly, the National Information and Communication Technology Policy 2015 is a well-thought-out document that covers all aspects of digital transformation necessary to establish a knowledge-based digital society in Nepal. The main objective of the IT Policy is to transform Government service delivery through the utilization of ICT.

The Broadband Policy 2015 was a timely document that guided the Government of Nepal in making broadband services accessible to citizens across Nepal. However, it is inadequate to address the challenges and harness the opportunities provided by 5G networks. The Broadband Policy 2015 was promulgated with a vision "to achieve affordable, secure, reliable and ubiquitous broadband for socio-economic transformation of Nepal." and objective "To develop a robust, secure, state-of-the-art broadband

infrastructure coverage in the country with special focus on rural and remote areas for bridging the digital divide to leverage broadband services for achieving sustainable development outcomes". The National Broadband Policy is designed to provide reliable broadband services on demand in Nepal. In order to accomplish the objectives, the policy hopes to create an enabling regulatory environment, develop backbone/backhaul and access network infrastructure, and make investments in people, content, applications, and innovation, and finally create services for rural parts of the country.

The Sixteenth Plan (2024/25–2028/29) of Nepal explicitly prioritizes the promotion of e-governance and digital transformation as a key strategy for achieving good governance and public service efficiency. The plan sets a target to improve Nepal's E-Governance Development Index from 0.512 in 2022/23 to 0.600 by 2028/29, reflecting a commitment to expand digital infrastructure and services across government institutions. Key areas of focus include increasing digital access, enhancing citizen-centric service delivery, integrating digital identity systems such as the national ID card, and improving public sector transparency and accountability using ICT. These efforts are designed to streamline administrative processes, reduce corruption, and ensure timely service delivery to citizens (NPC, 2024). These initiatives by the government are encouraging. However, institutionalizing E-Governance requires substantial and wider policy changes and formulation.

Current State of E-governance in Nepal

Identification of key achievements and milestones in E-governance initiatives

While the central government is leading the digitalization process, provincial governments are also making efforts to digitalize government services. Provincial governments, such as Gandaki, Sudurpashchim, Bagmati, and Madhesh, have formulated e-Governance Master Plans. Koshi Pradesh has come up with a concept called Digital Province. Similarly, other Provinces also have plans and programs on Digitalization and e-Governance. The Ministry of Federal Affairs and General Administration (MoFAGA) is looking after the implementation of e-Governance in the Provincial and Local governments. E-Governance Experts are working in each province and at the MOFAGA. IT officers work in all the local governments. GoN has also established the E-governance Board in 2022, for the promotion of electronic systems in public service delivery and government functions.

Nepal has enjoyed incredible success in digital adoption compared to its neighbors, with mobile penetration exceeding 100% and Internet penetration reaching 51.6% in 2023 (DataReportal, 2023). Nepal is expected to lead Internet penetration by 2025 in comparison to major economies such as China and India, given its growth trend over the next few years (Frost & Sullivan, 2019). Similarly, there were 15.85 million internet users and 12.60 million social media users in January 2023 (DataReportal, 2023). The GoN is now thoughtful and dedicated to promoting E-Governance for the implementation of various Government-to-Government (G2G), Government-to-Citizen (G2C), and Government-to-Business (G2B) plans defined under relevant importance areas (DataReportal, 2023). Nepal has been a strong proponent of e-commerce. For instance, the online shopping platform Daraz was launched in 2012. The COVID-19 pandemic has also highlighted the importance of reshaping systems to support changing preferences, accelerating the shift toward a digitally literate and cashless society.

Table 1

EDGI rank of Nepal compared with leading countries

2022 Nepal	2022	2020	2018	2016	2014	2012	2010	2008	2005	2004	2003
E-GDI rank	125	132	117	135	165	164	153	150	126	132	130
E-E-GDI value	0.51	0.46	0.47	0.345	0.234	0.266	0.256	0.272	0.302	0.28	0.268
	17	99	48	81	42	44	77	5	11	74	39
E-PI rank	143	137	55	89	110	134	127	152	73	75	61
E-PI value	0.23	0.36	0.78	0.508	0.294	0.026	0.057	0.022	0.079	0.065	0.137
	86	9	9	47	11	3	14	72	36	57	9
OSI value	0.45		0.68	0.398	0.157	0.287	0.168	0.287		0.335	0.318
	92	0.4	75	55	48	58	25	62	0.4	9	77
T I I value	0.51	0.46	0.24	0.167	0.168	0.059	0.022	0.011	0.006	0.006	0.006
	23	91	13	45	43	69	68	9	34	32	39
HCI value	0.56	0.54	0.49	0.471	0.377	0.452	0.582	0.517			
	36	5	57	42	4	6	6	58	0.5	0.5	0.48

Source: Dhakal, 2023

Analysis of Nepal's ranking in the E-governance development index and comparison with other countries.

Nepal's ranking in the UN E-Governance Development Index has been steadily climbing up as the figure below suggests at 125th as of 2022.

According to the 2020 E-government study by the United Nations, 193 countries were involved in E-Governance practice. Denmark takes the lead with a score of 0.9717 on the E-Governance Development Index (EGDI), followed by the Republic of North Korea (0.929) and Iran as sub regional leader with 0.6433 (Anityasari et al., 2024).

Identified Constraints and Opportunities of E-Governance in Nepal

Nepal has made steady progress in the ITC and E-Governance sector; yet, there are hurdles to achieving and institutionalizing E-Governance amidst numerous opportunities.

Constraints Inadequate Skilled Human Labor

At least four dedicated universities are providing ICT education in Nepal since 2002. Despite this, there is an issue with the older generation lacking any ICT skills, and brain-drain is seeing IT students opt for foreign education and jobs, which further exacerbates the shortage of human resources in the field of ICT and strengthens the e-Governance landscape of Nepal (Dhakal, 2023). There is a lack of capacity building initiatives on the government's side. While there are indications of these gaps narrowing (Buddhacarya & Chatterjee, 2019), Nepal has a long way to go in making up for the shortage of a qualified workforce. Furthermore, the low literacy rate 76.3% (Republica, 2023), in the country has led to a scarcity of skilled human resources in the field of ICT.

Constraints in delivering public services.

Inefficiency

A high degree of bureaucratization of the management system and resistance to change from government employees and citizens have been an impediment to accelerating the E-Governance transformation in Nepal. Furthermore, the lack of basic ICT skills and coordination and a positive attitude on the part of government officers and officials also impedes the progress of the application of E-Governance in Nepal.

Lack of political will and commitment

In many cases, bureaucratic machinery tends to resist e-government because of the prevalent traditional culture and practices, precisely the grant-recipient attitude, rather than a citizen-driven service delivery system that has been developed over centuries. Nevertheless, this has changed much since the political changes of the past two decades, but its traces are still too common. Likewise, political instability can make it difficult to implement long-term e-governance strategies, as changes in leadership or policy priorities may disrupt ongoing initiatives.

Technological Divide

Among the diverse citizens

Digital connectivity has been rising exponentially over the years. However, lack of digital literacy and access to a digital device still tends to put significant numbers of people with unfavorable power locations at a disadvantage in terms of having access. Access to government information and services would be important for such groups. Nearly 23,725,239 (Macrotrends, 2023). Nepalis live in rural areas that are often disconnected from the rest of the world, both physically and in terms of access to communication technologies. For most citizens, interacting with the government online is infrequent and is not typically the primary reason households purchase a personal computer and an internet connection (Chapagain, 2006). Further, while not all literate Nepalis speak English, the absence of software in their local language poses a considerable problem (Chapagain, 2006). Lack of awareness and sensitization among citizens and stakeholders also undermines the success of E-Governance.

Women and other marginalized groups

It is essential to emphasize that ICTs are not gender-neutral; they are not accessed, managed, and controlled by all men and women equally (Hijab & Zambrano, 2008). They further argue that men and women experience different benefits and effects of ICTs at all levels. Furthermore, understanding the gender roles and responsibilities is crucial to ensure that e-governance programmes and policies. Women face real barriers to using ICT, and the delivery of e-services fails to address critical gender gaps and women's basic needs (Hijab & Zambrano, 2008). The transition to e-government systems should therefore enhance the state's capability to implement women's empowerment and gender equality policies; invigorate responsiveness of government institutions to women's needs and interests; and build gender-sensitive accountability mechanisms (Staab & Razavi, 2015). Some data shows that women are less likely than men to use mobile internet. South Asia shows one of the largest gaps. For instance, GSMA/ITU reporting shows persistent mobile gender gaps in South Asia and least in the middle-income countries (Jeffrie, 2025).

Between the three tiers of government

While Nepal has made progress in furthering democratic institutions and e-governance processes since the adoption of a new constitution in 2015 and the transition from a unitary to a federal state, power continues to be centralized at the national level, and the powers of local government are not always well-defined. This has affected technology

transfer at the local level. Importantly, digital government services have the potential to shift power and influence local governments, but information technology systems may also contribute to centralized information control (Hooda, 2025).

Challenges To Cybersecurity

There has been growth in the government's use of citizens' data, biometric information, and personal details such as national ID numbers, passports, and voter cards. Cybersecurity poses a question on security. In fact, at the Tribhuvan International Airport, technical and system issues have frequently interrupted immigration services, causing inconvenience to passengers and impacting international flights (Dhakal, 2023).

High Cost Of Internet Per Income

Relative to income, Nepalis have the most expensive internet in Asia. Expanding connectivity will be key to achieving Nepal's goal of becoming a middle-income country by 2030 as per the SDG (United Nations, 2022). If broadband is not accessible to and affordable for all, the digital divide will continue to expand, leaving behind rural, poor, and minority groups.

A disconnect between planning and implementation

Nepal has made considerable progress in policies and programs targeting ICT and E-governance, with some success. However, there are numerous challenges to implementing them. And even when these policies are translated into tangible deeds, their efficiency is highly contested. For instance, the government launched the Nagarik App to streamline service delivery. Still, it fell short of its target to integrate 60 services by 2021/22, as only 45 services have been integrated so far (Dhakal, 2023). While effective implementation of these policy instruments can substantially complement Digital Nepal Program, it will be important to understand the role of a holistic policy regime (finance, security, administration, etc.) that transcends ICT domain (Dhakal, 2023). Effective policy implementation, information sharing, and data exchange will also require continued government commitment to open and interoperable IT systems. Continuous improvement also involves constantly evaluating and improving government services to ensure that they meet citizens' needs. It requires a culture of experimentation and learning, and a commitment to ongoing improvement.

Poor Infrastructure

Nepal ranks poorly in terms of resources and infrastructure required to establish a robust ICT and E-governance mechanism (Chapagain, 2006; Kharel & Shakya, 2012; Poudel, 2010; Shrestha et al., 2015). The challenge is exacerbated by the inadequate resources and infrastructure, with other basic physical infrastructure such as roads, electricity, and water supply (Poudel, 2010) that are closely tied up with the success of E-governance. Further, to ensure a proper E-Governance mechanism, constructing an adequate level of infrastructure, particularly in rural areas and across the country, including Tarai, Hills, and Mountains, is deemed crucial (Sharma et al., 2010).

E-Governance stands on the grounds of societal structures and framework and challenges inherent to socio-political reality. As such, its successes and failures are determined by socio-cultural norms, political institutions, economic foundation and priorities. Notable among these are: uneven power relations, structural inequality, indifference to a lack of morality, corruption, failed social justice, weak institutions, and oversight mechanisms. Thus, three fundamental action items for overcoming these barriers are a must for the success of E-Governance-catering for social justice outcomes in the design stage of programs, projects, and initiatives; appraising the ways in which people change themselves through their interaction with technologies; linking local enactments of e-democracy to global agendas and evaluation experiences (Molinari et al, 2016). Ignoring these aspects has impeded a full appreciation of the impact of governance and thus democracy itself (Molinari et al., 2016).

Opportunities

The public's exposure to technology, through mobile penetration and access to broadband, has increased their expectations. The increase in the workforce abroad and trends of overseas studies also caused a major socio-economic shift in the country, enabling better purchasing capacity among the people (Seddon et al., 1998). Likewise, an increase in the floating population in urban areas, increasing dependence on technology for mundane and professional work, etc., clearly indicates that Nepal is experiencing a major socio-economic and cultural shift conducive to the development of E-Governance.

The increase in IT-skilled human resources, albeit slowly, the availability of ICT education in the country, and the relatively lower labor rate mean the IT industry in the country has also developed largely (Joshi, 2016). The biggest telecom companies of the countries are investing in making their own infrastructure while the government is also investing from its side more on infrastructure (Gautam, 2016; Minehane, 2012). There are several tech companies in Nepal already and a good percentage of them are even subsidiaries of the United States and European companies in the Nepalese tech market (Joshi, 2016). The private sector's investment in technology has also led to the government and its institutions keeping up with technological advancements.

COVID Pandemic and the subsequent successful shift to digital services is yet another evidence of

Nepal's E-Readiness. Likewise, trends in use of mobile services like m-banking and telemedicine strengthens the argument that Nepal had reached technological readiness for E-Governance (Sherpa, 2015). The government's commitment, as indicated by policies and programs, is facilitating the institutionalization of E-Governance in Nepal.

Further, E-Governance presents a significant opportunity to tackle other socio-cultural and politico-economic problems in the country. Some have mentioned e-Governance as a possible means to overcome the digital divide (Dhakal & Jamil, 2012) across gender, geographic location, power locations, ages, etc. It could therefore facilitate establishing a robust democracy that upholds the value of participation, inclusion, transparency, accountability, curbs corruption, and transforms socio-economic conditions.

Nepal has implemented various ICT projects over the last decade. However, the actual application of digital technologies varies significantly across sectors. ICT is increasingly used in health services, education, agriculture, finance, government service delivery, and transportation. The rapid expansion of affordable smartphones and mobile broadband has enabled citizens to access these services more frequently in semi-urban and urban areas.

Despite this, the current implementation of ICT within the service delivery of the government remains limited. It is not only due to infrastructural constraints, but also reflects the socio-political, administrative, and institutional barriers. Poor integration system, inconsistent data standards, duplication of platforms are key challenges in e-governance in Nepal. Inadequate incentives for innovation hinder, low digital literacy among civil servants, and bureaucratic resistance to change hinder ICT-driven reforms in Nepal. Connectivity has been improving, but limited awareness of digital services, low levels of digital literacy, socio-cultural norms, and the absence of localized content are affecting the marginalized groups' access to ICTs. Because of this, the transformation of civil services remains slow because of some human capacity, institutional and structural challenges not being addressed.

Conclusion

E-governance establishes an interface among the various tiers of government, the private sector, the non-governmental sector, and the citizenry. Furthermore, e-governance employs ICT to modernize and improve democratic governance. One of the key aspects of e-governance is to provide an efficient and affordable connection between citizens and the government mechanism. It supports promoting accountability, transparency, and citizen engagement at minimal cost with high-quality public services. These are directly in line with the foundation of governance and ultimately a healthy democracy.

The findings show that e-governance status reflects broader debate on modernization in governance and democratic deepening. The expansion of the technology-based service delivery mechanism demonstrates the state's transformation toward citizen-friendly administration, efficiency, and transparency.

The government of Nepal launched the e-Government Master Plan in 2006, outlining a comprehensive strategy for the use of IT in government services. Further, the Digital Nepal Framework was launched in 2019 to transform Nepal into a digital society by 2025, improving the efficiency and effectiveness of government services; creating new opportunities for economic growth and development; improving the quality of life for citizens; and making Nepal a more attractive destination for investment and tourism. Recently, the Government of Nepal has introduced the Digital Nepal Framework 2019. The Digital Nepal Framework encompasses: One Nation, Eight Sectors, 80 Digital Initiatives, and is a blueprint that provides a roadmap to how digital initiatives can contribute to economic growth, find innovative ways to solve major challenges facing society in a shorter period with fewer resources, and identify opportunities for Nepal to participate in the global economy (Giri, 2018). The government has also been including various strategies in its national plan including the current 16th five-year plan which highlights good governance through ICT.

The central and provincial governments have been digitalizing government services, albeit slowly. Nepal has enjoyed incredible success in digital adoption compared to its neighbors, with incredible mobile and internet penetration exceeding (Government of Nepal, 2019). E-commerce, digital education, and digital medical services have also increased significantly. The expansion of telecommunications has also been remarkable, with private and public service providers competing for users. The COVID-19 pandemic also became a precursor for growth in digital service delivery. As a result, Nepal's ranking in the UN E-Governance Development Index has steadily gone up, even though it compares disappointingly to global and regional leaders like South Korea, Denmark, and Iran. There have been significant initiatives and achievements in the past couple of decades that indicate an E-readiness among the citizens as well as the government. Three tires of government are introducing ICTs to serve the people better even though the speed at which things are done is not very satisfactory.

Nepal continues to face challenges in implementing e-governance. These include the shortfall of skilled human labor; technological divide over diverse citizens, across gender, across generation, across various tiers of government; lack of political will, lack of efficiency, lack of infrastructure and resources, little public awareness about ICT, shortcomings in implementation of policies; and existing forms of socio-cultural and politico-economic disparities that threaten the implementation of

E-Governance. Despite various challenges, the government of Nepal is committed to using IT to improve the delivery of government services, and it has seen significant progress in these efforts in recent years. Citizens themselves are eager to be integrated with E-governance services as indicated by increasing usage of technological advancement in finance, education, information and connectivity, entertainment, and even mundane everyday chores.

The participation of citizens in the development process enhances governance and, ultimately, democratic ideals (Hao, Nyaranga, & Hongo, 2022). E-Governance facilitates the institutionalization of these values by improving the participation of citizens in the decision-making that transforms them from traditional grant-recipient status to drivers of decisions concerning them. It also ensures transparency and accountability by significantly reducing vertical service-delivery structures. In so doing, it facilitates curbing corruption and aids in socio-economic development.

Finally, the e-governance journey of Nepal demonstrates the limitations of the transformative potential of digital governance in a developing country like Nepal. It demands an integrated approach that combines institutional reforms, technology, and inclusive governance practices.

Declarations

Ethics approval and consent to participate
Not Applicable

Consent for publication
Not Applicable

Availability of data and materials
The secondary data was collected by the author. In this paper, qualitative data was presented as required for the thematic issues.

Competing interests
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