



An Assessment of Nepal's E-Governance: Progress, Challenges, and Opportunities for Strengthening Transparency and Combating Corruption

Authors: ¹Deepak Poudel*, ²Dr. Balkar Singh

Affiliation: ¹Research Scholar, Department of IT, Sunrise University, Alwar, India ²Supervisor,
Department of IT, Sunrise University, Alwar, India

Abstract:

E-governance in Nepal holds significant potential to enhance transparency and reduce corruption, yet its full implementation faces numerous challenges. This study explores the effectiveness of e-governance by examining public perceptions, satisfaction levels, implementation barriers, and future opportunities, drawing on qualitative insights from eight key informants, including IT professionals, policymakers, and government service providers. Interviews were audio-recorded, transcribed, translated, and analyzed thematically. Findings indicate that digital platforms, such as the Nagarik App, have improved access to government services, particularly in urban areas; however, rural regions continue to experience gaps in technology access, digital literacy, and infrastructure. While e-governance has positively influenced service delivery and curbed corruption in certain sectors, obstacles such as resistance to change, inadequate infrastructure, and limited digital skills persist. Public satisfaction is higher in urban areas compared to rural ones, highlighting the uneven impact of e-governance. The study emphasizes the need to bridge the digital divide, strengthen digital literacy, enhance service quality, and invest strategically in infrastructure to ensure inclusive access and maximize the role of e-governance in promoting transparency, reducing corruption, and fostering efficient governance in Nepal.

Keywords: *Combating corruption, Challenges, E-governance, Opportunities, Transparency*

Introduction

E-governance refers to the application of information and communication technology (ICT) to promote governance that is simple, ethical, accountable, responsive, and transparent often summarized as SMART governance (Heeks, 2003; ITPF, 2014; Priya & Dalakoti, 2008). It facilitates more efficient interaction between citizens, businesses, civil society, and government institutions through service models such as Government-to-Citizen (G2C), Government-to

Business (G2B), and Government-to-Government (G2G) (Ghayur, 2006). In the context of Nepal, initiatives like the Digital Nepal Framework and the National ICT Policy 2015 aim to modernize public administration by leveraging technology to strengthen transparency and improve service delivery (GoN, 2019). Although certain digital interventions have successfully enhanced service efficiency and reduced opportunities for corruption, others continue to struggle due to technical, organizational, and resource-related constraints. Despite these challenges, the growing use of ICT in public administration shows significant promise for advancing democratic accountability and overall governance performance (Akbar et al., 2019; Kim, 2019).

E-governance is widely regarded as an important instrument for reducing corruption by increasing openness and limiting arbitrary decision-making (Lio et al., 2011; Nam, 2018). Research by Choi (2014) and Park and

Kim (2019) supports its positive role in controlling corruption; however, scholars also caution that it may unintentionally enable new forms of digital misconduct or fail due to low ICT capacity, inadequate infrastructure, and institutional weaknesses (Bhatnagar, 2003; Heeks, 2003; Sheryazdanova & Butterfield, 2017). In Nepal, despite ongoing efforts to digitize public services, factors such as resistance to organizational change, gaps in policy implementation, and limited public trust continue to impede progress (Basyal & Seo, 2017; Bertot et al., 2010). Therefore, this study aims to examine how effectively e-governance contributes to reducing corruption and enhancing transparency in Nepal by exploring public perceptions, satisfaction levels, implementation barriers, and future prospects for strengthening governance practices.

Methods

A descriptive qualitative study was conducted using semi-structured interviews with eight key informants directly engaged in Nepal's e-governance sector, including IT professionals, policymakers, and government service providers responsible for implementing and managing digital initiatives. The interviews were carried out in Nepali and audio-recorded with prior consent, after which all notes and recordings were transcribed in Nepali and translated into English for analysis. Using framework analysis, the researcher developed an initial coding matrix by repeatedly reviewing one transcript, refining the themes and categories, and then applying the finalized coding framework systematically across all remaining transcripts.

Results

The study's results were organized and presented under the following major themes: **E-**

Governance Advancing, Yet Uneven

Participants share mixed but generally aligned perspectives on the current status of e-governance in Nepal, agreeing that it remains in a transitional and evolving stage. Although notable advancements are evident in sectors such as municipal services and the Inland Revenue Department, full implementation across areas like health, finance, and other government services is still incomplete. This theme reflects the gap between the establishment of ICT infrastructure and its effective operationalization. Participants acknowledge that service delivery has improved particularly after the COVID-19 pandemic with online systems increasing convenience, accessibility, and administrative efficiency. However, they also point to persistent challenges, including slow response times, data congestion, and inadequate software management, which hinder the system from functioning at its full capacity. Overall, the theme highlights that while e-governance is progressing, its development remains uneven, with some sectors advancing rapidly while others continue to struggle with delays and implementation barriers.

P1: "The current state of e-governance in Nepal is still evolving; it hasn't progressed as envisioned in the master plan that was initially set. Recently, the government has implemented various software solutions and Nagarik app, especially with the Inland Revenue Department (IRD) making strides in this area. However, key portions of the e-governance framework have been developed mostly in a gradual manner. Despite the decision to follow a structured master plan for advancing e-governance, we still don't see that comprehensive development materializing as expected."

P2: "Currently, if we assess the status of e-governance in Nepal, we can say that it is in the development phase. Some services, such as municipal services and personal registrations, are being delivered through e-governance. However, in sectors like health, finance, and even various government services, comprehensive delivery through e-governance platforms has not yet been fully realized. The system is still in a growing phase with many opportunities for improvement and development ahead."

Nagarik App: A Central Tool Powering Nepal's E-Governance

Participants emphasize several major e-governance developments in Nepal, with the Nagarik App standing out as the most prominent digital governance platform. The app enables citizens to store essential documents such as identification cards and licenses on their mobile devices, reducing reliance on physical copies and making service access more convenient. It also facilitates online payments for services including licenses, passports, and school-related fees. Alongside this, the National Identity (NID) system has emerged as a crucial initiative aimed at centralizing citizens' data, now required for processes like banking. Additional progress has been noted in the health sector through improved access to patient records, and in the financial sector with advancements in stock trading and the integration of demat accounts. Despite these achievements,

participants point to persistent challenges such as delays in service delivery, technical glitches in the app, and gaps in infrastructure and data verification. Overall, these initiatives reflect meaningful progress, though further refinement is necessary to meet the broad and evolving needs of Nepal's population. This theme reinforces that the Nagarik App has become a central platform for digital governance, providing citizens with a streamlined and accessible gateway to government services and information.

P5: "One of the key initiatives is the Nagarik app, where we can input all our details. Now, when we are out, we don't have to carry physical documents like license; we can keep everything prepared in the Nagarik app on our mobile devices. Additionally, with e governance, we can also access our identification cards and ID cards through our mobiles."

P6: "Currently, the Nepal government is rolling out the Nagarik app, which is a positive step. It includes online payment systems for license and passports, as well as school and college fees."

Local Government Lead Digital Service Adoption

Participants noted that e-governance initiatives in Nepal have brought notable changes across several government sectors, with local governments especially municipalities and rural municipalities experiencing the most significant impact. Key services, including birth and death registration, traffic management, and local commerce, have been digitized, while sectors like public health and education have benefited from innovations such as online learning platforms. Despite these advances, challenges persist, including the need for improved data integration, offline functionality for certain applications, and technical issues with platforms like the Nagarik App. Nonetheless, local government institutions are recognized as crucial drivers in improving service accessibility and operational efficiency through digital governance.

P1: "The local government sector has been significantly impacted by e-governance initiatives. The focus has been on digitizing key functions like birth and death registrations, local product commercialization, and improving traffic management. The health sector has also integrated digital tools to address public health concerns, and there are discussions in the education sector about implementing online learning to provide flexible opportunities for students."

P2: "In the context of Nepal, as previously discussed, the sectors most affected by e governance initiatives include local municipalities and rural municipalities, particularly in terms of registration services."

P3: "The government sectors most affected by e-governance initiatives in Nepal are primarily local government bodies, such as municipalities and rural municipalities. These entities are crucial as they serve as the first point of contact for citizens accessing government services. To enhance accessibility and efficiency, e-governance initiatives must be fully applied within these local government institutions."

Transparency Cuts Corruption through Digital Governance

The participants reflect that e-governance initiatives in Nepal have had a significant impact on reducing corruption by promoting transparency in government processes. Digital systems, such as online platforms for land registration and licensing, have minimized opportunities for bribery and manipulation by limiting human interaction and making processes more visible to the public. The introduction of cashless transactions and digital payment systems further reduces financial corruption, as it eliminates intermediaries and makes transactions traceable. However, challenges remain, such as technical issues with e-governance platforms and hidden charges that continue to create opportunities for corruption. Additionally, while e-governance can reduce corruption by increasing accountability, there are instances where the misuse of digital systems has, in some cases, inadvertently led to new forms of corruption, as people exploit the system for personal gain or pay extra to bypass technical issues.

P1: "E-governance reduces corruption not perfectly zero, but significantly. Transparent digital systems, like automated land registration, cut human interference and bribery risks. Giving citizens online access removes shady backdoor deals. Going paperless, like many advanced nations, also helps. We may not be fully digital yet, but 'less paper' means less corruption."

P2: "In Nepal, we've seen real progress. Before, government tenders relied on brokers taking cuts, corruption was easy. Now, our PPMO web system cleans up the process. We're also digitizing licenses and payments to stop cash leaks. Imagine adding blockchain, suddenly ownership records become transparent. This isn't just about technology; it's about building fairness everyone can trust."

P3: "E-governance's power lies in transparency, the clearer the system, the less corruption thrives. Without transparency, e-governance fails. Take government offices: when services are delayed or denied, citizens deserve clear explanations. That accountability eliminates dark corners where corruption grows."

Low Public Awareness and Inconsistent Uptake of E-Governance Services

Discussions with participants revealed that public perceptions of e-governance services in Nepal are varied, with notable gaps in both awareness and usage. While some citizens value the convenience offered by digital platforms such as the Nagarik App, many still lack a comprehensive understanding of e-governance and its potential benefits. This limited awareness is particularly pronounced in rural areas, where traditional in-person methods remain the preferred approach for services that could otherwise be accessed online. Younger, tech-savvy citizens tend to utilize e-governance more effectively, whereas older individuals or those with limited digital literacy often rely on intermediaries, sometimes incurring additional costs. The findings underscore the need for enhanced communication, training, and awareness programs to enable broader public engagement and ensure that more citizens can fully leverage the advantages of digital governance.

P3: "The perception of e-governance among the general public is quite limited. Most citizens don't understand e-governance, the government hasn't explained it well. Even for simple tasks like passport applications, people still line up at offices, unaware they could do it online."

P5: "We young people find apps like Nagarik super helpful. But in rural areas? Many think they need a computer or 'the cyber' to use these services. Tech illiteracy slows everything down."

P6: "What I've observed is that, as a developing nation, there is a significant lack of awareness. The educated class that has access to technology is benefiting greatly from it. However, our parents and elders, they're lost without training. If the government taught them to use at least the Nagarik app, satisfaction would skyrocket."

Mixed Satisfaction and Digital Divide in E-Governance

Participants reported that public opinions on e-governance services in Nepal are mixed, with satisfaction largely influenced by individuals' access to and familiarity with digital tools. Urban residents with adequate digital infrastructure generally express higher satisfaction, particularly with platforms like the Nagarik App, which streamlines processes such as registration and document management. In contrast, rural communities face significant barriers, including limited internet access, a shortage of digital devices, and low digital literacy, which restrict their ability to fully utilize these services. Minor errors in digital procedures can also lead to frustration, as users often have to restart tasks. While some citizens appreciate the convenience provided by e-governance, others experience confusion, dissatisfaction, or privacy concerns, highlighting the need for improved awareness, accessibility, and user support.

P1: "In areas where the e-governance system has been implemented, the public generally expresses satisfaction. People appreciate the efficiency that comes with online service delivery and online payment options; they find these aspects to be quite convenient and are often pleased with the improvements in service access. However, there is significant dissatisfaction regarding the areas where implementation has not yet taken place."

P2: "Generally speaking, when e-governance services are provided, people are quite happy. Apps like Nagarik work wonders for urban users, passports in a click! But rural citizens? Many travel hours to offices, lack internet, or don't understand digital tools. The divide is real."

P6: "When it comes to satisfaction, there are mixed feelings. Those who can use these services tend to be satisfied, while those who cannot are often dissatisfied. More than just dissatisfaction, it seems they are confused about how to use these services and are concerned about issues like privacy."

Challenges in Implementing E-Governance in Nepal

The participants highlight several challenges hindering the effective implementation of e governance in Nepal. Major issues include limited government strategies and commitment, particularly in terms of coordinated execution and the expansion of digital infrastructure. A pronounced digital divide exists, with urban populations benefiting more than rural communities, where access to essential technology such as the internet, digital devices, and electricity remains constrained. Many citizens also face difficulties in adapting to digital services due to resistance to change and low levels of digital literacy. Additionally, corruption within the system can impede progress, as some individuals exploit digital platforms for personal advantage. To overcome these barriers, experts recommend prioritizing infrastructure development, enhancing internet connectivity, promoting digital literacy, and establishing community-based service centers to bridge the rural-urban gap. Strengthening data security, raising public awareness, and addressing resistance to technological adoption are also crucial for ensuring the effective and equitable implementation of e-governance initiatives.

P1: "Government strategies lack urgency. While digital literacy improved during COVID, gaps remain. We need better infrastructure, training, and commitment to make e governance work for everyone."

P2: "IT services only reach cities. Rural areas lack infrastructure, and policies gather dust. Nepal must prioritize realistic IT plans and invest more like other countries do."

P3: "People resist change - both citizens and officers. The old system feels comfortable. Changing this mindset is our biggest challenge in implementing e-governance."

P4: "We face capacity issues and a digital divide. Without devices or connectivity, villagers can't access services. We need community centers like India's to bridge this gap."

P5: "Data security keeps me awake. The government must build leak-proof systems to protect citizens' IDs, bank details, and sensitive information from hackers."

P6: "Corruption kills progress. Some sabotage digital systems to keep taking bribes. Add to this - no electricity, no internet in villages. How will e-governance reach all 77 districts?"

P7: "The challenges? Simple: no internet, no devices, and too much poverty. Basics first."

P8: "In remote areas like Jumla, even mobile towers are missing. Economic disparities mean no smartphones. And local corruption? Another roadblock to digital Nepal."

Strengthening E-Governance for Transparency and Inclusivity

Participants emphasize several opportunities to enhance the effectiveness of e-governance in reducing corruption. A key factor is the thorough implementation of the government's e governance master plan, with particular attention to overcoming execution and funding challenges. Expanding digital services to rural and hilly areas is critical to ensure inclusivity and equitable access. Simplifying administrative procedures such as enabling online applications for citizenship can increase transparency and reduce chances for bribery by facilitating direct payments to government systems. Moreover, minimizing reliance on intermediaries through improved internet connectivity and user-friendly platforms for rural populations is essential. Strengthening e governance legislation, alongside broad-based education and awareness programs, will empower citizens to effectively engage with digital services, thereby further curbing corruption.

P2: "E-governance must reach rural and hilly areas, not just cities. With Nepal's geography, services need to work everywhere, or exclusion will continue. With an online system, payments could go directly to the government, ensuring greater transparency and reducing opportunities for bribery. If the government prioritizes establishing a functional online system for these processes, it would lead to a lot of improvements."

P6: "We can prevent corruption if we can address the role of mediators in services. However, this requires ensuring internet access reaches all villages. It's not just about access; the services also need to be user-friendly. It should be convenient for people in rural areas, so that individuals, including our parents and relatives, can easily use mobile devices and understand that these services are for them and that they are secure."

P8: "Yes, but only if everyone has the knowledge and skills to use it effectively. When people can handle their own work through e-governance, corruption can be minimized. However, this requires widespread education and awareness."

Digital Transformation for Transparency and Anti-Corruption

Participants highlight that digital transformation in Nepal holds significant potential to reduce corruption and improve transparency. For e-governance to achieve these goals, comprehensive digitalization is essential. Shifting to fully digitized services and cashless transactions can minimize opportunities for informal fees and enhance transparency by making government procedures more standardized and visible. Centralizing and digitizing data further reduces the risk of corruption, as all changes are systematically recorded. Implementing e-governance systems across both rural and urban municipalities is critical to ensure payments are made directly to government accounts, thereby strengthening accountability. Moreover, educating citizens about digital processes and data security will encourage broader engagement with these services. Existing initiatives, such as the Nagarik App and online passport services, have already shown positive effects in limiting corrupt practices.

P1: "Overall, while technology has certainly evolved in Nepal, the ultimate theme remains focused on digitalization. For e-governance to effectively combat corruption and enhance transparency, it is essential that we fully embrace this digital transformation."

P2: "Absolutely! If we fully embrace digitized services and implement cashless transactions, it could effectively minimize corruption by significantly reducing commission fees. A system where all government services are executed through an e-governance framework would greatly enhance transparency and accountability."

P6: "I believe that for e-governance to effectively combat corruption and enhance transparency, it is essential to provide users with a clear understanding of the processes involved. Show citizens the process, let them track permits or recommendations in real time. When people see security and clarity, they'll engage. No shadows, no corruption."

Discussion

The findings of this study indicate that Nepal's e-governance is gradually evolving but continues to fall short of expectations outlined in the national master plan. Progress has been slow and fragmented, hindered by weak implementation, limited sectoral integration, inadequate infrastructure, and political instability. While the COVID-19 pandemic accelerated digital initiatives and improved service accessibility particularly in the Inland Revenue Department and municipal services Nepal still lags behind international standards (Sharma, 2020). Despite widespread mobile technology use, internet connectivity, and social media penetration, the country's low ranking on the E-Government Development Index highlights its unpreparedness for fully effective e-governance (Buddhacarya & Chatterjee, 2019). Limited public awareness about e-governance concepts and benefits further constrains adoption. While e-governance has the potential to enhance administrative efficiency, transparency, and democratic engagement, bridging infrastructure gaps, promoting digital literacy, raising awareness, and ensuring comprehensive sectoral implementation remain critical.

Participants acknowledged advancements such as the Nagarik App and online applications, which have improved service accessibility. However, inefficiencies persist, including the need for in person visits, insufficient centralized platforms, limited data verification, and incomplete digital integration, especially given Nepal's geographical and literacy challenges. These observations align with Phuyal (2024), who notes the Nagarik App's positive impact but emphasizes ongoing challenges requiring further improvements. The participants also highlighted the key role of local governments in delivering digital services, particularly in birth and death registration, health, and education, echoing Dhonju and Shakya (2019). Nevertheless, issues such as lack of centralized systems and limited internet access hinder their effectiveness, a concern also emphasized by Pandey (2024), who underscores the need for capacity building among officials alongside IT infrastructure development.

The study corroborates existing literature regarding e-governance's positive impact on reducing corruption by increasing transparency and accountability. Participants emphasized that digital systems limit human interaction, reducing opportunities for bribery and manipulation, echoing with findings by (Mistry and Jalal 2012), who observed that e-Government initiatives have a more significant impact on reducing corruption in developing countries. This is consistent with Irfan (2017) and Pathak et al. (2008), who highlight how e-

governance fosters better government-citizen relationships and contributes to public service improvement. The participants also discuss the challenges of misuse and hidden charges, which contrast with Kaur and Singh (2015), Pathak and Prasad (2005) and Pathak et al. (2008), who argue that effective implementation of e-governance can be a powerful tool against corruption when well executed. Overall, the participants' insights agree with these studies, though they add that without proper system design, training, and implementation, the full benefits of e-governance may not be realized.

Participants also highlighted the mixed public perception of e-governance, reflecting limited understanding among citizens. While some appreciate digital services, many remain unaware of the broader benefits, echoing West (2006) and Badu (2024). Weak long-term strategic planning and insufficient motivation, as noted by Dhimi and Futó (2010), further reflect the need for improved public outreach and education to ensure inclusivity. User satisfaction was higher among digitally literate citizens, whereas rural and older populations faced challenges due to the digital divide, limited access, and low literacy, aligning with GC et al. (2024) and Adhikari (2007). Weak infrastructure, poor connectivity, inadequate electricity, low-quality networks, resistance to change among senior officials, corruption, and insufficient skilled human resources collectively hinder effective implementation. These findings underscore the need for ICT capacity building, infrastructure expansion, public awareness campaigns, and stronger leadership to achieve successful e-governance outcomes.

The study findings, consistent with Dike (2019), affirm e-governance's potential to enhance transparency, accountability, citizen participation, and administrative efficiency. Effective implementation requires not only strategic planning but also addressing practical challenges such as funding, infrastructure, digital literacy, and equitable access. Participants particularly emphasized Nepal's unique geographical constraints, corruption issues, and reliance on intermediaries in rural areas, while global studies focus on administrative efficiency, privacy, and multilingual access. Both perspectives converge on the idea that e-governance can significantly improve governance quality but requires comprehensive, inclusive, and well-managed government efforts with active citizen engagement.

Finally, the study aligns with global experiences (Neupane 2024), emphasizing the need for emerging technologies, strong infrastructure, centralized citizen data, data security, and legal frameworks. While developed nations like Estonia and Singapore excel through advanced digital strategies, developing countries, including Nepal, face challenges such as weak infrastructure and low digital literacy. Successful initiatives like India's Digital India campaign demonstrate that targeted efforts can overcome these barriers. Similar challenges in Sri Lanka Irfan (2017), including shortages of skilled users, political instability, and underdeveloped IT infrastructure, mirror Nepal's context. Evidence from Alam et al. (2023), Ndou (2004), Twizeyimana and Andersson (2019), and Furuholt and Wahid (2008) further emphasizes e-governance's role in promoting accountability and transparency, thereby reducing corruption. While contextual differences exist, the overarching conclusion remains: effective e-governance is central to enhancing transparency, accountability, and service delivery, provided that it is supported by proper infrastructure, legal frameworks, citizen awareness, and strategic implementation.

Conclusion

In conclusion, Nepal has made noteworthy progress in implementing e-governance, yet significant challenges persist in fully realizing its potential. Initiatives such as the Nagarik App and online government services have streamlined administrative processes and improved accessibility, particularly in urban areas. However, uneven adoption, limited digital literacy, and gaps in infrastructure especially in rural and remote regions continue to restrict the full benefits of digital governance. The capacity of e-governance to enhance transparency and reduce corruption is evident, but achieving its maximum impact requires continued efforts to bridge the digital divide, strengthen public awareness, and ensure inclusive access for all citizens. Prioritizing the development of robust digital infrastructure, improving service quality, and fostering digital literacy are essential for realizing the vision of a fully functional, equitable, and effective e-governance system in Nepal.

References

- Adhikari, G. P. (2007). Key issues in implementing e-Governance in Nepal. *ACM International Conference Proceeding Series*, 232, 243–245. <https://doi.org/10.1145/1328057.1328107>
- Akbar, A. G., Rosidi, & Andayani, W. (2019). The Impact of a Procurement Implementation and Government Internal Control System on Goods/Services Procurement Fraud Prevention by Using Organization Ethical Culture as a Moderating Variable. *Jurnal Economia*, 15(1), 69– 81. <https://doi.org/10.21831/ECONOMIA.V15I1.23618>
- Alam, T., Aftab, M., Abbas, Z., Ugli, K. M. M., & Bokhari, S. A. A. (2023). Impact of E Government Initiatives to Combat Corruption Mediating by Behavioral Intention: A Quantitative Analysis from Emerging Economies. *Sustainability* 2023, Vol. 15, Page 2694, 15(3), 2694. <https://doi.org/10.3390/SU15032694>
- Badu, N. (2024). *Challenges to Implementing e-Governance in the Local Bodies of the Sudurpaschim Province of Nepal* [NEPAL OPEN UNIVERSITY]. https://www.researchgate.net/publication/382636240_Challenges_to_Implementing_e_Governance_in_the_Local_Bodies_of_the_Sudurpaschim_Province_of_Nepal
- Basyal, D. K., & Seo, J.-W. (2017). Employees' resistance to change and technology acceptance in Nepal. *The Journal of University Grants Commission*, 6(1). https://www.researchgate.net/publication/326424417_EMPLOYEES'_RESISTANCE_TO_CHANGE_AND_TECHNOLOGY_ACCEPTANCE_IN_NEPAL
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27(3), 264–271. <https://doi.org/10.1016/J.GIQ.2010.03.001>
- Bhatnagar, S. (2003). Transparency and corruption: Does e-government help? *DRAFT Paper Prepared for the Compilation of CHRI*, 1–9. <https://faculty.iima.ac.in/~subhash/pdfs/CHRIDraftPaper2003.pdf> <http://unpan1.un.org/intradoc/groups/public/documents/unpan/unpan035963.pdf>
- Buddhacharya, K., & Chatterjee, J. M. (2019). E-Governance in Nepal: The Challenges in the Implementation of the National Identity Card in Nepal. *LBEF Research Journal of Science*, 1(1), 20–40. https://www.academia.edu/41335030/E_GOVERNANCE_IN_NEPAL_THE_CHALLENGES_IN_THE_IMPLEMENTATION_OF_THE_NATIONAL_IDENTITY_CARD_IN_NEPAL
- Choi, J. W. (2014). E-government and corruption: A cross-country survey. *World Political Science Review*, 10(2), 217–236. <https://doi.org/10.1515/WPSR-2014-0012/MACHINEREADABLECITATION/RIS>
- Dhami, D. B., & Futó, I. (2010). Implementation challenges of e-governance in Nepal and possible steps towards solutions. *Proceedings of the 8th International Conference on Applied Informatics*, 423–435. https://www.academia.edu/93391727/Implementation_Challenges_of_e_Governance_in_Nepal_and_Possible_Steps_towards_Solutions
- Dhonju, G. R., & Shakya, S. (2019). Analyzing Challenges for the Implementation of E Government in Municipalities within Kathmandu Valley. *Journal of Science and Engineering*, 7, 70–78. <https://doi.org/10.3126/JSCE.V7I0.26795>
- Dike, E. E. (2019). e-Governance and Administrative Efficiency: Issues and Challenges. *International Research Journal of Engineering and Technology & Social Strategies*, 5(11), 266–271. <https://internationalpolicybrief.org/wp-content/uploads/2023/10/ARTICLE16-14.pdf>
- Furuholt, B., & Wahid, F. (2008). E-government challenges and the role of political leadership in Indonesia: The case of Sragen. *Proceedings of the Annual Hawaii International Conference on System Sciences*. <https://doi.org/10.1109/HICSS.2008.134>
- GC, S. B., Gurung, S. K., & Jung Bahadur Rana, S. B. Dhungana, B. R. (2024). e-Governance, citizen satisfaction and net benefits: the moderating effect of digital divide. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2402512>
- Ghayur, A. (2006). The e-government: A jigsaw view. *IFIP International Federation for Information Processing*, 226, 203–214. https://doi.org/10.1007/978-0-387-39229-5_17
- GoN. (2019). 2019 Digital Nepal Framework: Unlocking Nepal's Growth Potential. In *Government of Nepal*. <https://drc.gov.np/storage/backend/pages/resources/others/D8lp6S0TBu0kqwXB7V90hB9aodF4v6qTLGzUvN7M.pdf>
- Heeks, R. (2003). Most eGovernment-for- Development Projects Fail: How Can Risks be Reduced? In *iGovernment working paper series* (14; I Government). <http://idpm.man.ac.uk/publications/wp/igov/index.shtml>

- Irfan, M. I. M. (2017). The Role of E-Governance in Administrative Efficiency and Combating Corruption: Case of Sri Lanka. *Global Journal of Management and Business Research*, 17(2), 1–13.
- ITPF. (2014). *E-Governance Master Plan (eGMP) (2015 - 2019 AD)* (Issue July 2014). [https://nitc.gov.np/assets/img/fileSystem/download/23-07-27-021435-E-Governance Master Plan-DoIT 2015-2019 Draft \(3\).pdf](https://nitc.gov.np/assets/img/fileSystem/download/23-07-27-021435-E-Governance-Master-Plan-DoIT-2015-2019-Draft-(3).pdf)
- Kaur, M., & Singh, A. (2015). E-Government: Challenges for Acceptance and Adoption in State of Punjab. *International Journal of Computer Applications*, 109(15), 20–23. <https://doi.org/10.5120/19265-0976>
- Kim, R. (2019). Rethinking Open Data in E-Government in Korea: An Analysis of the Utilization Gap. *Korean Soc Sci J*, 46(June), 57–75. www.data.go.kr
- Lio, M. C., Liu, M. C., & Ou, Y. P. (2011). Can the internet reduce corruption? A cross-country study based on dynamic panel data models. *Government Information Quarterly*, 28(1), 47–53. <https://doi.org/10.1016/J.GIQ.2010.01.005>
- Mistry, J. J., & Jalal, A. (2012). An empirical analysis of the relationship between e-government and corruption. *International Journal of Digital Accounting Research*, 12(May), 145–176. https://doi.org/10.4192/1577-8517-v12_6
- Nam, T. (2018). Examining the anti-corruption effect of e-government and the moderating effect of national culture: A cross-country study. *Government Information Quarterly*, 35(2), 273–282. <https://doi.org/10.1016/J.GIQ.2018.01.005>
- Ndou, V. (Dardha). (2004). E – Government for Developing Countries: Opportunities and Challenges. *EJISDC*, 18(1), 1–24.
- Neupane, M. P. (2024). Expanding Practices of E-Governance System in the Contemporary World. *Journey for Sustainable Development and Peace Journal*, 2(2), 54–74. <https://doi.org/10.3126/JSDPJ.V2I2.69570>
- Pandey, H. (2024). *Application status of e-governance in Nepal (a case study of Butwal sub metropolitan city of Nepal)*. <https://elibrary.tucl.edu.np/bitstreams/6de3471f-776a-4322-8246-8dc98637df09/download>
- Park, C. H., & Kim, K. (2019). E-government as an anti-corruption tool: panel data analysis across countries. *International Review of Administrative Sciences*, 86(4), 691–707. <https://doi.org/10.1177/0020852318822055>
- Pathak, D. R. D., & Prasad, D. R. S. (2005). Role of E-Governance in Tackling Corruption and Achieving Societal Harmony: Indian Experience. *Network of Asia-Pacific School and Institutes of Public Administration and Governance (NAPSIPAG) Annual Conference 2005, December*, 5–7.
- Pathak, R. D., Singh, G., Belwal, R., Naz, R., & Smith, R. (2008). *E-Governance, corruption and public service delivery: A comparative study of Fiji and Ethiopia*. 3(1), 65–79.
- Phuyal, P. (2024). Digitalization of government services and citizen satisfaction: A case study in Dhankuta district, Nepal. *The Nepalese Journal of Public Administration*, 56(1), 135–152. <https://nepjol.info/index.php/prashasan/article/view/67336>
- Priya, D. A., & Dalakoti, C. (2008). E-Governance: Fast Track Democratising Tool. *GJBM*, 2(2), 75–89.
- Sharma, G. (2020). Digital governance in Nepal. *Journal of Management Research*, 12(3), 17. [https://www.researchgate.net/profile/Gajendra Sharma/publication/342358874_Digital_Governance_in_Nepal/links/5f1fadda92851cd5fa4e2853/Digital-Governance-in-Nepal.pdf](https://www.researchgate.net/profile/Gajendra-Sharma/publication/342358874_Digital_Governance_in_Nepal/links/5f1fadda92851cd5fa4e2853/Digital-Governance-in-Nepal.pdf)
- Sheryazdanova, G., & Butterfield, J. (2017). E-government as an anti-corruption strategy in Kazakhstan. *Journal of Information Technology & Politics*, 14(1), 83–94. <https://doi.org/10.1080/19331681.2016.1275998>
- Twizeyimana, J. D., & Andersson, A. (2019). The public value of E-Government – A literature review. *Government Information Quarterly*, 36(2), 167–178. <https://doi.org/10.1016/J.GIQ.2019.01.001>
- West, D. M. (2006). *Global E-Government*. <https://www.insidepolitics.org/egovt06int.pdf>