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Expanding Practices of E-Governance System in the Contemporary World

Madhab Prasad Neupane[1]
Mail: madhab_mm@yahoo.com

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Abstract

E-governance marks a significant transformation in public administration by incorporating Information and Communication Technology (ICT) to improve government operations and enhance citizen interaction. This paper offers an extensive review and synthesis of empirical issues and practices related to e-governance worldwide, with a particular emphasis on Nepal. Through a systematic literature review, the study explores academic articles, books, and reports to uncover critical themes in e-governance frameworks, challenges in implementation, and overall effectiveness. Key findings reveal ICT's pivotal role in modernizing governance, the varying success of e-governance policies across nations, and specific challenges encountered in Nepal, including insufficient infrastructure, low levels of ICT literacy, and political instability. The paper identifies several research gaps, such as the need for detailed data from rural areas, the creation of a tailored digitalization strategy for Nepal, and a comprehensive examination of both the benefits and drawbacks of ICT in governance. It also proposes future research directions, highlighting the necessity of contextual adaptation and longitudinal studies to more effectively address local needs.

Keywords: E-governance, ICT, Nepal, digital divide, governance models, implementation challenges, systematic literature review

Introduction

The advent of the digital era has led to significant transformations in societal operations, with Information and Communication Technology (ICT) emerging as a crucial driver of global development. As ICT becomes increasingly embedded in everyday life, it has given rise to the field of ICT

[1]*Lecturer at Tri-Chandra Multiple Campus, G.P. Koirala Memorial College and Himalayan College.*

for Development, which aims to harness technology for societal advancement. This digital shift has also impacted governance, leading to the evolution of what is known as e-governance. E-governance signifies a major departure from traditional governance models by integrating information technology to improve the efficiency and effectiveness of public administration. Its goal is to create more transparent, accountable, and responsive government systems by streamlining processes and reducing transaction costs (Bhuiyan, 2011).

Despite its potential, the implementation of e-governance presents significant complexities and challenges. It involves a wide range of technologies and platforms, including mobile devices and social media, which require careful integration and management (Montserrat, 2010). The absence of established frameworks to manage these diverse technologies can result in disorganization and inefficiencies, as noted by Sandoval-Almazan and Gil-Garcia (2012). While e-governance offers the potential to transform public service delivery and enhance transparency, its effectiveness varies greatly depending on the context. Advanced economies may experience more seamless transitions, whereas developing countries like Nepal encounter unique challenges such as inadequate infrastructure, low literacy rates, and political instability.

In this framework, the paper aims to review and synthesize empirical research on e-governance with a particular focus on Nepal, to offer a nuanced understanding of its potential and challenges. This analysis seeks to provide insights into how developing nations can effectively address the complexities of digital governance.

Method

To conduct a thorough review and synthesis of empirical issues and practices related to e-governance both globally and within the context of Nepal, this study utilizes a systematic literature review methodology. The review process begins with an extensive search across major academic databases such as Google Scholar, JSTOR, and Scopus. The search targets peer-reviewed articles, books, and reports that address various dimensions

of e-governance, including frameworks, implementation challenges, and effectiveness. Relevant studies are identified using keywords such as "e-governance," "ICT in public administration," "global e-governance practices," and "e-governance in Nepal." The selection criteria ensure that the sources are empirical, peer-reviewed, and offer comprehensive insights into both global and local perspectives on e-governance. The review includes literature from the early 2000s to the present to capture recent advancements and emerging trends.

Following the literature search, thematic analysis is conducted to categorize and synthesize the findings into key themes, such as economic benefits, service quality improvements, governance enhancements, and challenges faced by both developed and developing countries. This analysis enables a comparative review of empirical data and theoretical frameworks across different contexts, with a focus on case studies from Nepal. The synthesis aims to uncover patterns, inconsistencies, and research gaps, providing a nuanced understanding of the effectiveness and limitations of e-governance initiatives. By examining how global practices impact local implementations and identifying areas for improvement in Nepal's e-governance strategies, this methodology offers valuable insights for advancing digital governance across varied settings.

Result and Discussion

Conceptualizing E-Government and E-Governance

E-Governance represents a significant reform in governance, driven by the innovative use of Information and Communication Technology (ICT) to improve information accessibility and enhance service quality for citizens. Governments are increasingly investing in e-governance projects to streamline and optimize governance processes, aiming to provide more efficient and transparent public services. Assessing the tangible benefits of these initiatives is crucial for evaluating their effectiveness (Priya et al., 2015). Effective e-governance ensures streamlined access, secure information flow, and fair, impartial service delivery across governmental departments (Kalam, 2003).

Globally, the transformative potential of ICT in public administration is increasingly recognized, with efforts focused on improving service delivery efficiency and cost-effectiveness (Bhuiyan, 2011). E-Government, broadly defined, involves the use of ICT to revolutionize government operations, making them more accessible, effective, and accountable. Typically, e-Government development is categorized into four stages:

1. **Information Availability:** Basic online presence and information access.
2. **One-Way Interaction:** Platforms for communication from citizens to government entities.
3. **Two-Way Interaction:** Interactive platforms facilitating dialogue between citizens and government.
4. **Full Online Transactions:** Comprehensive online services, including transactions and payments (Srinivasan & Iyappan, 2009).

E-Government can be analyzed from both narrow and broad perspectives. The narrow perspective, or "e-Government in small," focuses on administrative processes within e-Administration. The broader perspective encompasses a wide range of ICT applications supporting government operations, citizen engagement, and service delivery, including e-services, e-democracy, e-voting, e-justice, and potentially e-education or e-healthcare.

E-Governance extends the traditional concept of e-Government by addressing evolving public problem-solving approaches. This shift moves from a centralized, hierarchical model to a more dynamic system characterized by self-organizing inter-organizational networks that facilitate the exchange of local and global knowledge in the digital economy. Therefore, contemporary strategies of governance involve a diverse array of stakeholders, methods and approaches beyond the conventional actors which goes beyond the government, just politicians and civil servants (Sapkota, 2023a). While a narrow approach to e-Government may lead to technocratic governance or a shift from bureaucracy to infocracy, e-Governance emphasizes the active online engagement of multiple stakeholders in developing and implementing public policies. Within this framework, in general, e-Governance can be categorized into four key dimensions:

(i) **E-Services:** Online delivery of services to citizens.
(ii) **E-Management:** Digital management of government operations.
(iii) **E-Democracy:** Platforms fostering democratic engagement and participation.
(iv) **E-Commerce:** Online commercial activities related to government services.

E-Governance Models for Addressing Practical Problems

E-Governance models have been developed to address a variety of practical challenges associated with implementing ICT in governance. These models focus on issues such as bridging the digital divide, enhancing user accessibility, and overcoming system integration difficulties. According to Bhuiyan (2011), for a developing country like Bangladesh, improving economic capacity and political commitment is crucial for effectively adopting and advancing e-governance, which is key to addressing poverty and corruption.

IT scholars have identified several practical challenges in e-governance implementation. Lusta and Aktas (2017) outline five notable e-government models: Layne and Lee's Model, the UN Model (2001), Hiller and Bélanger's Model (2001), and Wescott's Model (2001). Nielsen (2017) underscores the significance of formal e-governance models, using Estonia's experience as a case study. He emphasizes the need for clear mandates to ensure effective decision-making, conflict resolution, and achievement of strategic goals. Successful e-governance models often include strategies to bridge the gap between technologically advanced and less developed regions, ensuring equitable access to e-services. They also stress user-centric design, making platforms accessible and usable for all citizens, including those with limited digital literacy.

Incorporating feedback mechanisms and iterative improvements helps refine these systems to better serve diverse populations. Adopting a multi-stakeholder approach that involves government agencies, private sector partners, and civil society organizations can enhance collaboration and coordination, leading to more effective and sustainable governance

solutions mostly in developing countries (Mishra, 2007). These models also emphasize the importance of robust cybersecurity measures to protect sensitive information and ensure the integrity of e-governance systems, thereby fostering user trust and reliability. While e-governance is often seen as a means to reduce transaction costs, enhance tax collection, and expedite welfare services, Postman (1993) and Nath (2014) warn against excessive reliance on technology without critically evaluating its impact on governance and human development. E-government models typically depict a progressive development through stages, from transactional and interactive services to fully integrated e-government capabilities, including e-democracy and transformative governance (Bashir & Aktas, 2013).

Achieving Good Governance through E-Governance

E-Governance is pivotal in advancing good governance by enhancing transparency, accountability, and efficiency within public administration. Through the integration of Information and Communication Technology (ICT), e-governance streamlines government processes, thereby mitigating bureaucratic inefficiencies and improving service delivery. The goal of e-governance is to foster good governance characterized by openness, accountability, and effective service provision (Paramashivaiaha & Suresh, 2016). Former Indian President Kalam (2003) highlighted e-governance as a means to deliver transparent and impartial services. Good governance encompasses the promotion of an open, pluralistic society, transparency and accountability in government, reinforcement of the rule of law, media independence, and anti-corruption measures (Khan, 2016).

New Public Management (NPM), which emphasizes networked approaches, laid the foundation for e-governance as a tool for enhancing public sector management. E-Governance employs ICT to improve efficiency, transparency, and cost-effectiveness in governance, aiming for outcomes such as more economical, faster, better, and more innovative governance practices (Heeks, 2003). Transparent e-governance systems enable the open dissemination of information, allowing citizens to access details about government operations and decisions, thereby fostering public trust and civic engagement.

Moreover, ICT tools enhance accountability by providing mechanisms for monitoring and assessing government performance, facilitating prompt responses to citizen feedback and complaints. E-Governance also promotes participatory governance through digital platforms that enable citizen involvement in decision-making processes, ensuring that policies and services better align with public needs and preferences. These advancements contribute to a more inclusive and responsive governance framework, which is crucial for addressing contemporary challenges and supporting sustainable development.

Significance of ICT in Governance

Information and Communication Technology (ICT) has fundamentally transformed modern governance by significantly enhancing efficiency, accessibility, and transparency. The integration of ICT into government operations streamlines processes, reduces administrative burdens, and speeds up service delivery through automation and digitalization. These technological advancements not only minimize errors but also improve the timeliness of public services, making them more effective and responsive. Furthermore, ICT boosts accessibility by allowing citizens to access government services and information remotely, thus reducing the need for physical visits and enhancing convenience. This increased accessibility promotes greater citizen engagement and participation in governance.

The rapid progression of ICT has reshaped service delivery methods in both business and government sectors (Akbar, 2015). E-governance is not simply about automating existing procedures but involves rethinking how governments operate and provide services (Maharjan, 2015). Growing public expectations for efficient and effective services drive governments to adopt e-government solutions (Silcock, 2001; Gonzalez et al., 2007; Bannister & Connolly, 2015). The success of e-government initiatives relies on both government support and the willingness of citizens to embrace these services (Carter & Bélanger, 2004).

Mugellini et al. (2007) identified three perspectives for evaluating the benefits of e-governance:

- **Social Perspective:** Enhancements in information quality, reduction in administrative burdens, increased accessibility, improved service levels, personalized services, multichannel delivery, and support for citizen mobility.
- **Economic Perspective:** Enrichment of public services, improved public-private partnerships, cost reductions, decreased budgetary barriers, shorter process times, increased efficiency, and enhanced economic competitiveness.
- **Technical Perspective:** Better cooperation, shareable infrastructure, improved interoperability, information reuse, integration with legacy systems, and scalability.

Additionally, ICT plays a vital role in fostering transparency and accountability. Digital platforms grant citizens online access to information and decision-making processes, thereby enhancing governmental openness, building public trust, and reducing opportunities for corruption. By facilitating data-driven decision-making, ICT enables governments to base policies on real-time information and analytics. As digital technologies advance, their role in shaping effective and inclusive governance practices will continue to grow, further enhancing the efficiency, accessibility, and transparency of public administration.

Digital Divide and Digital Capitalism

The digital divide refers to the disparity between individuals who have access to modern information and communication technologies (ICT) and those who do not. This gap can be observed across various dimensions, including geographic, socio-economic, and educational lines. In wealthier regions, widespread availability of digital tools and high-speed internet facilitates technological leverage for educational and economic advancement. In contrast, in less affluent areas, restricted access to ICT can worsen existing inequalities, limiting opportunities for personal and professional development. The digital divide not only obstructs equitable access to information and services but also perpetuates socio-economic disparities by creating barriers to participation in the digital economy.

The digital divide is indicative of socio-economic inequalities rather than just technical deficiencies (Jan & Van, 2006). It underscores differences in access to and utilization of ICT, affecting various socio-economic groups (Warschauer, 2003). Bridging this divide requires addressing income disparities, skill gaps, and growing inequalities both within and between societies (Wade, 2002; Ya'u, 2004). The focus should be on tackling the underlying socio-economic issues rather than relying solely on technological solutions.

Digital capitalism further exacerbates the digital divide by intertwining economic power with technological access. In a capitalist framework, the ownership and control of digital infrastructure and data become significant assets, often concentrated among a few large corporations. This concentration of power can deepen the digital divide, as those with fewer resources struggle to compete in a market increasingly driven by digital capabilities. Additionally, the commodification of digital services and data raises concerns about privacy and exploitation, as personal information is frequently monetized without adequate protection or fair compensation. Addressing the digital divide in this context necessitates not only improving access to technology but also ensuring the fair and equitable distribution of digital resources and opportunities to counteract the disparities intensified by digital capitalism.

Effectiveness of E-Governance Policies

The effectiveness of e-governance policies varies widely across different countries, influenced by their distinct socio-economic contexts, technological infrastructures, and governance structures. In developed nations such as Estonia and Singapore, e-governance policies have achieved notable success due to their advanced technological frameworks and well-defined digital strategies. For example, Estonia's e-Residency program and digital ID system have streamlined administrative processes, increased transparency, and promoted innovation by offering a cohesive digital interface for both residents and non-residents. Similarly, Singapore's Smart Nation initiative integrates diverse digital services and

data analytics to enhance urban planning, healthcare, and public safety, setting a high standard for effective e-governance.

Conversely, developing countries frequently encounter significant obstacles in implementing e-governance policies effectively. Challenges such as insufficient infrastructure, low digital literacy, and political instability can hinder progress. For instance, in several African nations, the deployment of e-governance services has been delayed by limited internet access and inadequate support for rural areas. Nevertheless, there are successful examples in developing countries as well. For example, India's Digital India campaign has made notable advances by improving digital infrastructure and service delivery while addressing access barriers. Evaluating the success of e-governance policies requires a nuanced understanding of these varying contexts, acknowledging both achievements and ongoing challenges that influence their effectiveness.

Effective e-government initiatives can lead to economies of scale, cost reductions, and improved technology-enabled user services. However, the link between citizen-centered e-government services and cost savings needs further investigation (Bertot et al., 2008). The evolving nature of citizen-centered e-government requires continuous commitment, measurement of service quality, and a cultural shift towards user orientation. This approach can bridge gaps between government service providers and users, enhancing service utilization, impact, and interaction (Jaeger & Thompson, 2004).

Research conducted by Akbar (2015) in Saudi Arabia showed a positive correlation between employee training and service efficiency, as well as between e-government implementation and trust. On the other hand, inefficiencies and negative outcomes may arise if services fail to meet user needs, leading to costly revisions (Bertot et al., 2008). The goals outlined in Tennessee's 2004 IT strategic plan demonstrate that while e-government can improve service delivery and efficiency, it often does not achieve broader administrative reforms (Halachmi, 2004).

Future Directions for E-Governance and ICT in a Digitalized World

As the digital landscape evolves, the future of e-governance and Information and Communication Technology (ICT) is expected to be shaped by several emerging trends and innovations. One prominent development is the integration of artificial intelligence (AI) and machine learning into e-governance systems. These technologies have the potential to significantly enhance decision-making processes, improve service delivery, and enable predictive analytics for more effective governance. AI-driven tools can automate administrative tasks, personalize citizen interactions, and offer data-driven insights to tackle complex public policy issues. Additionally, the implementation of blockchain technology is anticipated to bolster transparency, security, and accountability in government transactions by ensuring immutable and verifiable records.

E-governance is a specialized field within social sciences that merges public administration with ICT, intersecting with disciplines such as political science, sociology, and psychology. Within development studies, it falls under the category of ICT4D (Information and Communication Technology for Development). Pieterse (2010) critiques ICT4D for its focus on market expansion and deepening, which can sometimes exacerbate digital inequalities.

Karabulatova et al. (2017) emphasize the importance of clear internal communication between the state and the public and highlight the significance of information sharing within society. Mobile phones are identified as crucial for sustainable development, providing opportunities for education, poverty reduction, and health improvements (Fuchs, 2008; UNDP, 2012). In Nepal, mobile technology could offer a promising solution for addressing development challenges in terms of information, communication, technology and recreation. However, its misuses should be tackled strategically particularly among the children and youths.

A key focus for future development is ensuring inclusivity and digital equity. As digitalization progresses, it is crucial to guarantee that all citizens have equal access to e-governance services. This includes

addressing the needs of underserved populations, such as those in rural areas, the elderly, and low-income individuals, to bridge the digital divide. Future initiatives should also focus on creating user-friendly platforms and support systems that accommodate diverse needs and capabilities. Furthermore, advancements in cybersecurity will be vital for protecting sensitive data and maintaining public trust in digital governance systems. By prioritizing these aspects, the future of e-governance and ICT can promote a more equitable, efficient, and secure digital society.

E-Governance in the Nepalese Context

In Nepal, advancing e-governance has been a crucial focus for enhancing public administration and service delivery. The government has invested significantly in digital infrastructure to modernize administrative processes and improve accessibility to services for its citizens. Initiatives such as online portals for various government services, digital payment systems, and e-procurement platforms are designed to streamline operations and reduce bureaucratic inefficiencies (Kharel & Shakya, 2012; Pariyar, 2007). However, the implementation of these technologies faces challenges including infrastructure limitations, such as unreliable internet access in rural areas, and varying levels of digital literacy across the population. Ensuring effective e-governance in Nepal requires addressing these disparities to provide equitable access to digital services.

Nepal is in the early stages of e-government development, with an E-Government Development Index of 0.3458, lagging behind neighboring countries like Bhutan and Bangladesh (UN Affairs, 2016). The country faces challenges such as a weak economy, high poverty rates, limited access to education and technology, and difficult geography (Adhikari, 2007; Prennushi, 1999). Despite recognizing the importance of ICT, Nepal's e-governance efforts encounter obstacles like poor implementation and infrastructural deficits (Dhakal & Istiaq, 2010; Sharma, 2014). Previous initiatives, including the National Tele-centre Pilot and the One Laptop Per Child (OLPC) project, have faced significant difficulties (Lee & Sparks, 2014). However, the increasing accessibility of mobile phones is seen as a potential solution to some of the country's development

challenges (Hennings et al., 2014). In this context, Sapkota (2023b) argues that e-governance can be instrumental for Nepal's modernization process in the age of ICT and digital capitalism.

Nepal has initiated several ICT-related projects, such as establishing the National Information Technology Centre (NITC) in 2001, creating the High-Level Commission for Information Technology (HLCIT) in 2003, introducing the Electronic Transactions Act in 2004, and formulating a five-year action plan for e-governance (E-GMP) in 2006. Additionally, Nepal Open University (NOU) offers Masters and MPhil programs in e-governance and ICT, exploring the intersections between government, business, and civil society through digital means (NOU, 2020).

Various policies and strategies guide ICT development in Nepal, including:

- Telecommunications Act and Regulations (1997)
- IT Policy 2000
- IT Policy 2004 (Draft)
- Telecommunication Policy 2000
- IT Policy 2010
- National Information and Communication Technology Policy (2015)

The 2072 Constitution of Nepal includes provisions under Part 4, Article 51, Sub-Article f(5), to promote IT development, enhancing public access and utilization for national development. Several governmental and non-governmental agencies are involved in promoting and implementing IT policies in Nepal, including the Ministry of Communication and Information Technology and the National Information Commission. These organizations, along with the media sector, corporate sector, academia, civil society, and financial institutions, contribute to the digitalization of Nepal, regulated through various rules and guidelines to ensure the development of a sustainable and equitable digital society.

Prospects and Challenges of E-Governance Development in Nepal

The development of e-governance in Nepal presents both significant opportunities and formidable challenges. Priya et al. (2015) proposed a

comprehensive framework for assessing e-governance benefits, which they categorized into four dimensions: economic benefits, quality of service benefits, quality of governance benefits, and personal development. Bekkers (2011) emphasized the potential advantages of integrating e-government studies with research in innovation, technology, and governance. However, Bekkers (2007) also noted that some governments lack a coherent vision for managing innovations, which can hinder progress.

Adhikari (2010) and Bhuiyan (2011) highlighted e-governance's potential role in controlling corruption and reducing poverty by offering opportunities for cost-effective service delivery in modern public administration. Similarly, Nielsen (2017) observed that while informal networks and individual roles can drive vision and coordination, they may also lead to confusion and failure if responsibilities overlap or conflict.
In Nepal, the implementation of e-government faces several challenges, including low literacy rates, low per capita income, inadequate infrastructure, a shortage of human resources, political instability, lack of leadership and commitment, limited financial resources, and insufficient awareness and training (Adhikari, 2012; Kharel & Shakya, 2012). Overcoming these challenges requires the development of a conducive environment and effective conceptual frameworks, which should be validated through real-life applications.

Despite its potential benefits, e-governance has not fully realized its promise in both developed and developing countries. Key obstacles include political leadership issues and bureaucratic inertia. The digital divide—defined as the gap between those who have access to ICT and those who do not—poses a significant challenge. E-governance has the potential to revolutionize governance by transitioning from traditional bureaucratic systems to more responsive and effective models (Islam & Ahmed, 2007).
For Least Developed Countries (LDCs) like Nepal, the challenges are compounded by a significant digital divide, inadequate e-infrastructure, and a lack of skills and competencies necessary for managing e-government systems (Heeks, 2003; Mutula, 2008; Nkohwo & Islam, 2013; Shin, 2008; Twizeyimana, 2017).

Despite these challenges, the successful integration of ICT in governance requires not only technological solutions but also effective policy frameworks and stakeholder engagement. To enhance e-governance, Nepal must include capacity-building initiatives to train government officials and citizens, and invest in infrastructure to support digital inclusivity (Poudel, 2010). By addressing these barriers and fostering a culture of digital engagement, Nepal can leverage e-governance to improve transparency, accountability, and overall governance effectiveness.

Research Gaps

Further research should indeed focus on the contextual adaptability and customization of e-governance frameworks to align with the socio-economic and cultural specificities of Nepal. Current literature often relies on generic models that may not account for the unique needs and constraints faced by Nepalese communities. Exploring how e-governance initiatives can be tailored to fit local governance structures, cultural practices, and economic conditions is crucial for enhancing their effectiveness and sustainability. Longitudinal studies that track the evolution of e-governance impacts over time will provide a more nuanced understanding of long-term benefits and challenges. This approach will allow researchers to offer actionable insights for policymakers and practitioners aiming to improve digital governance in Nepal and similar contexts.

Key areas for further research include:

1. **Contextual Adaptability**: Investigate how e-governance frameworks can be customized to align with Nepal's socio-economic and cultural contexts. This involves understanding how local governance structures, cultural practices, and economic conditions influence the implementation and effectiveness of digital initiatives.
2. **Granular Data from Rural Areas**: Collect more detailed data from rural regions to provide a clearer picture of ICT development status and needs. Understanding the specific challenges and opportunities in these areas is essential for crafting effective e-governance strategies.

3. **Impact of Governmental Initiatives**: Examine the effects of governmental initiatives on e-government service implementation at the local level. This will offer insights into how national policies translate into local practices and their impact on service delivery.
4. **ICT Education and Development**: Assess the relationship between ICT education levels and the success of ICT development efforts. As Sharma and Kim (2016) suggest, ICT education is closely tied to the prospects of ICT development, and research should explore how educational initiatives can support e-governance goals.
5. **E-Health Systems**: Explore challenges related to federalism and interoperability frameworks within e-health systems in Nepal, as highlighted by Pokharel (2018). This research could address specific obstacles and propose solutions for effective implementation.
6. **Appropriate Digitalization Models**: Develop and test models of digitalization that are suitable for Nepal's unique context. Existing models from developed countries may not address issues related to cost, reliability, trustworthiness, transparency, and accessibility adequately.
7. **Negative Aspects of ICT and E-Governance**: Investigate potential negative impacts such as hacking, privacy concerns, data loss, and misuse. The current literature often overlooks these issues, which are crucial for a balanced understanding of e-governance.
8. **Bridging Digital Divides**: Study factors that bridge various types of digital divides, including those between literate and illiterate populations, urban and rural residents, and different age groups. Understanding these divides will help in designing inclusive e-governance solutions.

By addressing these gaps, researchers can contribute to a more comprehensive understanding of e-governance challenges and opportunities in Nepal, offering valuable insights for enhancing digital governance practices and policies.

Conclusion

The examination of existing literature highlights that Information and Communication Technology (ICT) is widely utilized and serves as a fundamental marker of contemporary civilization, impacting various sectors and facets of society. The integration of digital and computational technologies into individual, organizational, and national frameworks has embedded these elements into the domain of e-governance. For e-governance initiatives to be sustainable, they must advance social justice and inclusivity, including gender equity.

In Nepal, despite the government's efforts to advance ICT and e-governance through diverse plans, policies, and strategies, there are ongoing challenges in effectively implementing these measures at multiple levels. Assessing the success of e-governance policies in terms of cost-effectiveness, accessibility, dependability, and suitability is essential. E-governance development demands a comprehensive approach that incorporates socio-economic, cultural, and psychological dimensions. Given the interdisciplinary nature of e-governance, development efforts must also be interdisciplinary. Furthermore, there is a potential risk that rapid digitalization may deepen digital imperialism, which could marginalize significant segments of the population and widen the digital divide. Thus, it is crucial to develop strategies to bridge this digital gap to ensure equitable and inclusive e-governance.

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