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The Use of Artificial Intelligence for Sustainable Local Governments in Nepal: A Framework for Digitalization of Public Service Delivery

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ABSTRACT

Artificial intelligence (AI) is increasingly discussed as a transformative tool for improving efficiency, transparency, and responsiveness in the public service delivery. In Nepal's federal governance system, the local governments are expected to deliver a wide range of services with the limited institutional and human capacity, making the public service delivery effective. This study examines the preparedness of Pokhara Metropolitan City to adopt AI-based tools, focusing on Wards 26 and 27 as the representative units of the frontline service delivery. A mixed-method research design was employed, combining a structured survey of 32 ward-level officials and staff with the document analysis of municipal policies and digital governance initiatives. The findings indicate that the basic digital infrastructure, such as the internet connectivity and device availability, is largely in place. The leadership support for the digital innovation and positive perceptions of AI benefits are also strong. However, the institutional readiness remains moderate due to some gaps in the policy frameworks, fragmented digital systems, and limited strategic planning for an AI adoption. Human capacity emerges as the most significant constraint with an inadequate training and limited exposure to the advanced digital tools despite a high willingness to learn. Based on these findings, the paper proposes a phased strategic framework emphasizing the infrastructure integration, AI governance, and capacity building. The study develops an empirical evidence to apply this framework in the ward-level context and offers a practical guidance for sustainable AI adoption in Nepali local governments.

KEYWORDS: Artificial intelligence, digital governance, local government, public service delivery

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INTRODUCTION

Artificial intelligence (AI) technologies are spreading quickly and are creating numerous new opportunities for the public sector organizations around the world. It is especially important at the local government level, where there is a direct interaction with the citizens. In a developing country like Nepal, the federal system has given many responsibilities to the municipal governments. To increase the belief towards the government services, AI can help to improve the service delivery, increase transparency and make the resource allocation more efficient. However, using the AI tool is not only a technical issue. It also needs the strong digital infrastructure, institutional readiness, and skilled human resources, which are not prioritized in many Nepali municipalities.

Among six metropolitan cities in Nepal, Pokhara Metropolitan City is a major tourist destination. It is facing many challenges to modernize its governance systems and address the multiple urban problems. But its economic and strategic needs make it a suitable case for studying the AI readiness and developing implementation frameworks, which can guide other similar cities, too. Although the deep interest is found in the smart city projects and digital governance is growing at the national level, there is still a lack of practical guidance for implementing AI at the local level. This stance creates a clear gap between the policy and its practice.

This study shows that a gap by examining AI readiness in two representative wards of Pokhara Metropolitan City in details. It helps to propose a strategic framework for sustainable AI implementation also. The study is based on the successful digital transformation in the specific contexts. It should connect to the local challenges while making the use of existing strengths. By focusing on the frontline of municipal service delivery, the smaller units such as wards, this study highlights some important details that are often overlooked in the large-scale studies. The impact of technology like AI on the efficiency and responsiveness of public services is widely discussed today. The governments are using AI to reduce the repetitive tasks and improve the citizen participation.

Using AI in the governments is not without some issues. There are many concerns about people's information and some people not having the same access to technology as others. These things cannot make people to trust the government. A lot of cities in Nepal do not have the skills to use AI and do not have their own clear plans for how to use it. AI should not just be about the technology it should also be about having the rules getting the public involved and teaching people new skills. In doing so, AI can help make sure that everything is fair and good for everyone, without making further problems. As Marguard and Dorobantu (2019) remark, AI can be used to improve the efficiency and citizen participation for the public services (p. 163). Equally, Heeks (2018) and the World Bank (2021) allege that the advantages of AI depend on the institutional preparedness, such as the presence of strong infrastructure, good data, and qualified staff. All these studies indicate that a successful AI implementation demands both technological and organizational readiness.

The recent publications reflect the conceivable practical implementations of AI in the work of the public sector, such as the automated document processing, chatbots, case management, fraud detection, and demand forecasting (Margetts & Dorobantu, 2019; OECD, 2021). An analysis of the policy reveals that AI has the potential to decrease the waiting time in the public services, minimize errors in administration, and enhance the evidence-based decision-making (OECD, 2021; World Bank, 2021). Although these studies suggest that

AI may enhance the quality of the service, the majority of empirical research is based on the high-income countries with a developed infrastructure, which constrains the implementation in the developing setting, such as Nepal.

The researchers make it clear that the effective use of AI requires the well-developed digital foundations. According to OECD (2021) and World Bank (2021), the key things are required to include the good infrastructure, proper record management, adequate staff digital competency, and data management models. They warn against the fast automation where there are no institutional preparedness, but suggest slow AI applications as per the local capacity. This view emphasizes that the implementation of the municipal and ward-level governance should be done on a phased basis, in a contextual manner.

The structural barriers to the municipal level of digital transformation are also determined by empirical research. The usual limitation is the paper-based administrative systems, poor internet connection, and low technical skills (Asian Development Bank, 2019; Asia Foundation, 2021). These constraints are especially high in the decentralized governments, where the local offices receive more responsibilities without the relevant resources. This kind of evidence supports the importance of considering the institutional and human capacity to adopt AI in the frontline service delivery.

In Nepal, these small digital projects owned by the locals have been more successful than the big centralized projects. According to Asia Foundation (2021), such digital interventions require staff training and ownership by the locals. Nevertheless, the majority of the studies are based on the reports of donors or organizations, instead of the independent research according to which the knowledge gaps remain on the areas of staff preparedness, operational difficulties, and experiences of citizens at the ward level. This implies that there is an urgent need to investigate through the empirical studies the local service delivery practices.

Although the national government of Nepal is dedicated to digital governance, the implementation of the policy in the local practice varies considerably by the municipalities and wards (IIDs, 2025; Shah, 2025). The researchers attempt to state that without the institutional preparedness, it cannot be afforded to spend money on the high-tech solutions. The World Bank (2021) identifies the inadequate data quality and insufficient preparedness as one of the primary reasons against the adoption of AI (p. 2). Similarly, Margate and Dorobantu (2019) mention that the effective AI implementations must be accompanied by a match between the technological resources and the institutional strengths (p. 163). These results indicate that there is a permanent breach between the national aspirations and the local functioning realities.

The theoretical frameworks can be used to understand the implementation of AI in a public organization. The technology-organization-environment (TOE) model focuses on how the technological competency, organizational attributes, and environmental issues interact in influencing the adoption decisions (Tornatzky & Fleischer, 1990). The institutional theory emphasizes the issues of normative pressure and legitimacy issues that shape the organizational decision making with regard to technology (DiMaggio & Powell, 1983). These frameworks indicate that the AI preparedness is multidimensional because it includes the infrastructure, organizational processes and human capability.

The ethical and institutional considerations are followed in the AI integration, which carry an important placement in research. According to

Janowski (2016), the AI preparedness is at par with the systemic digital transformation, with the preparedness of the organization being more important than the technological dexterity of an individual. According to Sun (2020), algorithms transparency, accountability, and data governance are ethical considerations that need to be incorporated in the institutional structures of responsible AI usage. All of these studies highlight the fact that the successful adoption of AI is not a technological project only but also the organizational, ethical, and capacity-driven one.

The literature is convincing in its efforts to justify the need to assess the local government AI readiness. Nevertheless, there are three major gaps. To begin with, there is a dearth of empirical studies regarding the readiness to AI by the municipalities and wards in the developing nations. Second, the available literature tends to discuss the technological, institutional, and human aspects separately, instead of discussing them as the interrelated aspects. Third, it has no empirical-based, local government-specific frameworks to be practically applied. This paper fills these gaps by carrying out a ward level review of AI preparedness in Pokhara Metropolitan City. The study provides a practical advice and empirical evidence towards the gradual and context-sensitive AI implementation in the local government services by analyzing the digital infrastructure, institutional capacity, human preparedness, and service delivery processes.

The purpose of this study is to conceive into the extent of the AI preparedness of the local government in Nepal, with the study based on the chosen wards of Pokhara Metropolitan City. It quantifies the main issues that the cities struggle to utilize AI in delivering the public services. Another aspect discussed in the study is the effects of digital infrastructure, institutional capacity, and human resources on the adoption of AI. The study also tries to define what type of practical and context-specific framework can facilitate the adoption of AI sustainably in the local governments, based on these issues. The key purpose of the study is to discover the AI preparedness of the chosen wards in Pokhara Metropolitan City. Besides, the study examines the position of infrastructure, institutional capacity, and human resources in influencing the AI adoption.

Lastly, the study will aim at creating a reliable and context-grounded framework for enhancing sustainable and effective application of AI in the delivery of public services. The research is limited to two wards of Pokhara Metropolitan City so it might not be representative of all the municipalities in Nepal. Mainly the research focuses on existing preparedness and might not show future technological and policy shifts. In depth of analysis might also be influenced by limited data availability and technical limitations at the local level.

RESEARCH METHODS

This study employed a mixed-method research design to capture both quantitative and qualitative dimensions of AI readiness. The quantitative data were collected through a structured questionnaire administered to all administrative staff and officials of Wards 26 and 27 of Pokhara Metropolitan City. Given the relatively small population size, a census approach was adopted, resulting in a total of 32 respondents. This approach ensured a comprehensive representation of ward-level perspectives.

The questionnaire was developed based on an extensive review of literature on the digital governance, technology adoption, and AI readiness. It comprised four main sections: demographic characteristics, digital infrastructure and

data systems, AI readiness and institutional preparedness and digital literacy, training, and confidence. The items were measured using a five-point Likert scale, except where otherwise specified. To ensure clarity and contextual relevance, the questionnaire was administered in Nepali and subjected to back-translation to maintain consistency with the English version.

The data collection was conducted through the face-to-face administration during the scheduled visits to ward offices in November 2025. This approach facilitated a clarification of questions and ensured a high response rate. Ethical considerations were addressed by informing the participants of the study's purpose and obtaining an informed consent.

The collected data were analyzed using SPSS version 25. The respondent characteristics and key variables were summarized using the descriptive statistics. Correlations among the relationships between the digital infrastructure, human capacity, and institutional readiness were analyzed using Spearman rank correlation. The document review was used to analyze the qualitative data to clarify and justify the results of the survey. The study follows to a context-related strategy and integrates the technical, institutional, and human variables to learn about the AI preparedness at the local level. Though the study is being conducted to two wards and using the self-reported data, it gives the valuable data on the AI preparedness in the municipal service delivery.

RESULTS AND DISCUSSION

The results obtained from the responses on the survey of closed-ended questionnaire are presented and highlighted in the result section. These results are interpreted, analyzed, and discussed in the discussion section. This section includes the results obtained from the survey questionnaires and case studies from the ward members' readiness for AI, and human capacity in terms of digital literacy, training, and confidence.

Table 1

Role of Respondents in the Ward Office (N=32)

Role in Ward	Frequency	Percent
Ward Chairperson	2	6.3
Ward member	10	31.3
Admin officer	14	43.8
IT Staff	2	6.3
Others	4	12.5
Total	**32**	**100.0**

Note. Percentages are based on the total number of respondents.

As shown in Table 1, a total of 32 respondents participated in the survey, representing the full population of staff and officials from Wards 26 and 27 of Pokhara Metropolitan City. According to this table, the administrative officers form the largest group, accounting for 43.8 percent of respondents. This suggests that the findings largely reflect the views of staff directly involved in daily administrative service delivery. The ward members represent 31.3 percent, contributing the perspectives related to the local decision making and governance. The ward chairpersons and IT staff are limited to two respondents each (6.3 percent), indicating the lower representation of senior leadership and technical specialists. The remaining respondents (12.5 percent) fall under other supporting roles.

Table 2

Educational Level of Respondents (N = 32)

Educational Level	Freq.	Percent
Primary Level (1-8)	8	25.0
Secondary Level (8-12)	13	40.6
Bachelor's	7	21.9
Master's and above	4	12.5
Total	32	100.0

Note. Percentages are calculated based on the total number of respondents.

While observing Table 2, most respondents have completed their secondary-level education (40.6 percent), followed by the primary-level education (25 percent). The respondents with a Bachelor's degree account for 21.9 percent, while 12.5 percent hold a Master's degree or higher. This states a mixed educational background, with a relatively small proportion having higher education. Such variation is relevant when examining the differences in digital skills, confidence, and readiness for the advanced technologies like AI.

Out of three major areas surveyed in this study, the first one is the digital infrastructure and data system; the next one is the AI readiness and institutional preparedness; and the last one is digital literacy, training, and confidence. The section-wise findings of the survey is discussed below.

The digital infrastructure and data systems are the fundamental pillars of current governance as they allow the organization to gather, retain, distribute, and process information in a trustworthy and secure manner. They assist in everyday functioning, informed decision making, and successful utilization of digital and AI powered tools in the field of public institutions.

Table 3 indicates that the best mean scores were the availability of devices (4.19) and reliability of the internet (4.31) where over 80 percent of the respondents reported a good agreement. This implies that the general digital infrastructure has been largely installed. The review of documents proves that the current municipal investments and especially those within the Digital Pokhara program that was introduced in 2022 have an increased access to computers and the presence of internet access. Nevertheless, the qualitative data indicate that there is discrepancy in the quality of devices with the certain offices still relying on the old or donated devices.

The least mean score (3.53) and the level of agreement (59.4 percent) were supported on the digital systems. This is a sign of disintegrated and non-integrated departmental systems. Despite the fact that the basic management information systems access is applied in the collection of taxes and the registration of citizens, they are non-interconnected and cannot be used simultaneously. This disaggregation hinders the efficient exchange of data and decreases preparedness to the AI-related services.

The data security and maintenance of digital records have an average performance. Although the digital records are kept in the key functions, the paper-based process dominates, which contributes to the duplication and lack of

Table 3

Descriptive Statistics for Digital Infrastructure and Data Systems (DIDS) (N = 32)

Item	Mean	SD	Median	Agreement
DIDS1: Device availability	4.19	0.75	4	84.40%
DIDS2: Internet reliability	4.31	0.7	4	87.50%
DIDS3: Digital system support	3.53	1.03	4	59.40%
DIDS4: Digital record maintenance	3.78	1.18	4	65.60%
DIDS5: Data security practices	3.88	1.01	4	68.80%
DIDS Composite	3.94	0.68	4	73.10%

Note: Agreement percentage combines "Agree" and "Strongly Agree" responses.

efficiency. The data security controls are rudimentary and only basic password controls are used, less advanced data security measures, password controls, and audit trails are minimally used. The total DID score of 3.94 implies the average state of digital infrastructure, which is enough to perform the simplest operations but not enough to implement the powerful AI applications. The ward secretary also reported that the paper-based tasks still dominate in office.

Similarly, the institutional factors significantly influence the technology adoption success. Table 4 presents AIRIP assessment results.

The highest score of leadership support of digital innovation was registered (mean=4.22) and 81% of the respondents reported the supportive attitudes of ward and municipal leaders. The finding were checked through the document analysis, in which several policy statements indicated the digital transformation as a municipal priority. Both the chairpersons' version in the public speech also stated that they are playing a crucial role to adopt the AI supported public service delivery. The difference between the leadership support and policy clarity (mean=3.41) indicates a serious implementation problem. The respondents indicated that there were only clear guidelines on the technology adoption by 47 percent of the respondents and the analysis of the documents revealed that the current ICT policies emphasize on the simple use of computers, not on the sophisticated applications such as AI.

The perceived benefits of AI score was high (mean=4.06), thus showing the positive attitudes towards the possible applications. The respondents also noted efficiency in the service delivery and decision-making transparency in particular. This optimistic attitude is a great strength in the change management endeavors.

The measures of institutional preparedness demonstrated the medium results (mean=3.56), where the qualitative data demonstrated that people were less aware of the idea of AI than they were of simple automation. The analysis of the documents did not find any particular AI strategies and implementation plans at the municipal or ward levels, yet more general digitalization models refer to emerging technologies.

The composite score of 3.81 on the AIRIP indicates that the institutional readiness is moderate, whereby the institution has the positive attitudes and supportive leadership but it is limited by the policy gaps and limited strategic planning. This trend supports the studies conducted in other developing settings in which the political will tends to be the precursor to institutional capacity to adopt technology (Hanna, 2016). Here, the

Table 4

AI Readiness and Institutional Preparedness (N=32)

Item	Mean	SD	Median	Agreement
AIRIP1: Institutional preparedness	3.56	1.12	4	56.30%
AIRIP2: Leadership support	4.22	0.89	4	81.30%
AIRIP3: Policy clarity	3.41	1.24	3	46.90%
AIRIP4: Perceived AI benefits	4.06	0.9	4	78.10%
AIRIP Composite	3.81	0.79	3.75	65.60%

Note: Agreement percentage combines "Agree" and "Strongly Agree" responses.

majorly training gaps and lack of skills to use these devices is depicted in the following table.

The respondents rated the computer skills as being adequate (mean=3.69, 72% rated it as adequate) with the majority of the staff being familiar with the barebones programs, including Word Processor, Spreadsheets, and email. Nonetheless, much of the qualitative data indicated that there was a lack of experience in working with the database management, data analysis software, or specialized municipal software.

The training indicators showed that there were a lot of gaps. The training received a low score (mean=2.28), and 66% of respondents indicated that they have an occasional training and/or short-term training. The proportion of training was also found to be low (mean=2.78) and 59% of them viewed the current training as inadequate. The analysis of the documents revealed that though the given municipality has the occasional digital literacy workshops, they are haphazard, generic, and not tied to the job requirements and technology adoption roadmap.

Regardless of the training gaps, there was a moderate level of trust in learning AI tools (mean=3.94), and 75% were confident in their readiness to adapt in the event of the relevant assistance. This observation indicates that even though the existing skills might be minimal, learning such preparedness is available as a key contributor towards the change management.

The most agreement was recorded in training needs an assessment (mean=4.19), and 88% of the respondents reflected the need to have more training prior to the AI implementation. This massive agreement brings into the crucial role played by the capacity building in the successful adoption of technology.

The trend in the use of software has shown a poor technological sophistication (mean=2.41), as 59% have been using the basic accounting software or MIS software. An analysis of documents demonstrated that though the specialized software is available to carry out the certain functions such as the property tax management and the application of such software is usually not fully utilized as there is a training gap as well as usability problem. The current level of digital literacy reflected in the DLTC composite score of 3.50 (removing the differently scaled items) shows that the current digital literacy is moderate and sufficient to perform the existing functions, but that it needs to be developed to be able to adopt AI. The training gaps that are critical are

Table 5

Digital Literacy, Training, and Confidence (N=32)

Item	Mean	SD	Median	Agreement
DLTC1: Computer skills	3.69	0.99	4	71.90%
DLTC2: Training received	2.28	1.14	2	65.60%
DLTC3: Training sufficiency	2.78	1.24	3	59.40%
DLTC4: AI confidence	3.94	0.9	4	75.00%
DLTC5: Training needs	4.19	0.89	4	87.50%
DLTC6: Software usage	4.41	0.96	2	59.40%
DLTC Composite	3.5	0.72	3.5	65.60%

Notes: DLTC2 uses different anchors (1=No training, 5=Advanced training). DLTC6 uses different anchors (1=No software, 5=Advanced AI tools). Composite excludes DLTC2 and DLTC6 due to different scaling.

both an issue and an opportunity with the current capacity being low but the expressed needs and readiness to learn is high and presents the favorable conditions to do the targeted interventions.

The rank-order correlation by Spearman was used to investigate the correlation between the individual dimensions of Digital Infrastructure and Data Systems (DISD), Digital Leadership and Technical Capacity (DLTC), and the general AI Readiness and Institutional Preparedness (AIRIP).

Table 6

Spearman's Rank-Order Correlation between DIDS items, DLTC items, and AIRIP (Composite) (N = 32)

Variables	P	p
DIDS → AIRIP		
DIDS1	.05	.79
DIDS2	.18	.33
DIDS3	−.48**	.005
DIDS4	.46**	.009
DIDS5	.57***	.001
DLTC → AIRIP		
DLTC1	.21	.25
DLTC2	−.03	.89
DLTC3	.50**	.003
DLTC4	.21	.25
DLTC5	.02	.90
DLTC6	−.22	.22

Note. Values are Spearman's rho.**p < .01**, ***p < .001**

Among the DISD indicators, DISD3 was statistically significantly and moderately negatively related to AIRIP (3.48, p =.01), which demonstrated that the flaws in this particular part of the infrastructure are linked to a lower level of institutional AI readiness. Conversely, the moderate positive correlations in DID4 (r =.46, p <.01) and DID5 (r =.57, p <.001) indicated that more developed or effective digital systems were strongly associated with the AI preparedness in the ward. There were no statistically significant associations of DID1 and DID2 with AIRIP.

With regards to the digital leadership and technical capacity, DLTC3 had a moderate positive and statistically significant relation with AIRIP (c =.50, p <.01). It means that the staff expertise, education, or technical ability are critical in enhancing the institutional readiness to AI. The rest of the DLTC indicators displayed weak and not significant correlations implying the imbalanced ability of leadership and technical aspects.

In general, the findings indicate that all the infrastructure or leadership elements are not equally helpful in the AI preparedness. Rather, the particular digital systems and specific technical capacity elements have a greater impact than the general availability or formal leadership structures. It aims to build a digitally enabled, AI-governed, and human capable environment through a phased and sustainable implementation.

Tier 1: Digital Infrastructure Platform

Beyond the elementary connectivity, the infrastructure development should advance to provide a unified platform on which the AI applications can be implemented. The findings result in the four priority areas:

The existing devices are sufficient regarding the basic functions but need upgrading to use the AI applications. The municipality ought to have the minimum specifications of workstations, which are sufficient to handle the data-heavy applications in terms of processing power and memory. The wards with the outdated equipment must be replaced based on the purchasing schedule, and procurement should be centralized to enjoy the economies of scale. The mobile device policies must provide the flexibility in addition to the security needs.

Though the reliability of the internet is high, the AI applications can exceed the

bandwidth demands. The municipality ought to carry out a bandwidth evaluation on all the ward offices, where upgrading is needed to be done. The critical locations should be made available to the redundant connectivity options (e.g., fiber primary with 4G backup). The use of internet services should also be negotiated at the municipal level so as to have the uniform quality and pricing.

The identified fragmented systems are a significant limitation. The municipality ought to come up with an integrated data platform that incorporates the currently used MIS systems via standardized APIs. This platform must be modular in nature and need to be developed gradually with still being interoperable. Scalability should also be viewed as the cloud deployment, with the relevant data sovereignty provisions.

The existing security measures have to be implemented to cope with AI-related risks. The municipality needs to come up with an elaborate cybersecurity system that includes the account management, encryption rules, audit reports, and recovery actions. All the ward offices should be required to undergo a security evaluation regularly, and the results are to be addressed with the help of targeted interventions.

Tier 2: AI Governance Structures

The institutions should also change the organizational structure to offer a direction and responsibility towards the AI programs. There are three elements that are crucial:

The policy gaps that were detected need to be addressed. The municipality is supposed to come up with the detailed AI adoption policy that includes: ethical principle (equity, transparency, and responsibility), procurement principles, data management, and implementation principles. It is necessary to make this policy by the participatory processes and include all the stakeholders so that there is a buy-in and relevancy to the context. The mechanisms of regular reviews ought to be put in place to deal with these emerging issues.

There must be the clear institutional arrangements to organize the AI initiatives. The municipality needs to develop an AI Steering Committee that includes the technical specialists, team heads, and representatives of citizens. A local implementation and feedback effort should have an AI Champion assigned to each ward. The particular projects should be assigned the cross-functional teams of implementation, involving a variety of opinions and experiences.

The adoption of AI is only successful with an extensive support. The municipality ought to organize the frequent consultation forums with the citizens, the private sector, and civil society organizations to relay the AI initiatives, concerns, and reflect the input. The establishment of trust in the public is critical in ensuring that they have a clear information concerning the AI applications, their use, and their limits.

Tier 3: Development of Human Capability

The identified massive training gaps should be addressed in a systematic manner using the tiered approaches. The different training needs should be met based on the different roles and levels of competency whereby the basic digital literacy must be provided to all employees with the minimum computer skills who require the basic applications and data management knowledge. Similarly, the AI awareness of the administrative staff, including the fundamental AI concepts, the possible uses, and the implications of the changes can be addressed. More to the point technical specialization be specialized in the IT personnel where the hands-on training in the AI tools, data management, and system integration are provided. Lastly, the leadership

development will be implemented on the ward leaders; this is based on strategic decision-making, realization of benefits, and ethical governance. The training will need to combine the various approaches (workshops, online modules, mentoring), and involve the practical activities based on the municipal data and scenarios.

The adoption of technology is highly creative in an organization. The municipality ought to create an effective change management plan that covers the areas of communication, stakeholder involvement, managing resistance, and realizing the benefits. The initial victories are to be emphasized to create a momentum, and the issues should be addressed openly. The staff contributions towards a successful implementation should be recognized through the recognition programs.

The single training interventions are unable to sustain the AI capabilities. The municipality must put in place a lifelong learning system that includes the frequent skills evaluations, just in time the learning material, communities of practice, and the mechanisms of knowledge sharing. Legislation by the partnership with the academic institutions and technology providers will be able to raise the learning opportunity and create the local expertise.

The framework is to be carried out in a three-phase process of 36 months: The first actions to be done are: forming the AI Steering Committee, carrying out infrastructure evaluation, providing simple digital literacy training, and creating the provisional AI policies. The indicators of success are: 100 percent of the staff have undergone the basic training that all the ward offices have met the minimum architecture requirements and that the draft policies have been used to be consulted.

This step is aimed at: identifying and deploying 3 to 5 high impact AI pilots like the citizen complaint management, resource optimization, creating the municipal data platform, and initiating dedicated AI training. The measures of success will be: efficiency gains of at least 30 per cent of pilot applications, positive user review, and interim training completion by target employees. The last stage includes: extending successful pilots to all wards, adapting AI to every department in the city, creating systems of continuous learning, and creating the innovation relationships. The success indicators are the following: AI in place in at least half of municipal services, 15-20 percent in cost savings in the specific domains, and an established model in the municipal AI adoption.

This paper will give a critical evaluation of AI preparedness in Pokhara Metropolitan City with an identification of the opportunities and limitations for the digital transformation. The results show the moderate digital infrastructure and institutional readiness, the high level of the leadership support of the innovation, and the positive expectations of the benefits of AI, yet some considerable gaps in the policy frameworks and training courses. The fact that there is no remarkable difference between the two wards studied indicates that there could be the municipal-wide implementing methods, but certain local adjustments are required.

The findings were proposed to be addressed by the proposed strategic framework via an integrated intervention on the infrastructure, governance, and human capacity dimensions. The phased implementation strategy would enable the municipality to develop gradually with the current advantages and improve on the important limitations. The framework is the context-sensitive, which highlights that the best way to successfully adopt AI is to adjust to the local circumstances, not to use the foreign models.

CONCLUSION AND RECOMMENDATIONS

This study provides an empirical assessment of AI readiness at the ward level in Pokhara Metropolitan City. The

findings reveal a mixed picture: while the basic digital infrastructure and leadership support are in place, many significant challenges remain in the institutional preparedness and human capacity. The AI adoption in the local governments cannot be achieved through technology alone; it requires the coordinated development of infrastructure, governance frameworks, and skills. This paper presents the overall evaluation of AI preparedness in Pokhara Metropolitan City, as well as the sources of opportunities and limitations for the digital transformation. The results show the medium indicators of digital infrastructure and institutional readiness, high leadership support on innovation, and good attitudes towards the benefits of AI, but there are few high gaps in the policy framework and training programs. The fact that no serious differences were found between the two wards under study that leads to the possibility of municipal-wide application methods, but a certain context-adjustment is still needed.

By offering a ward-level analysis and a practical strategic framework, the study contributes to the ongoing debates on the digital governance in the developing countries. For the Nepali municipalities facing the increasing service demands under federalism, a cautious, phased, and capacity-centered approach to the AI adoption is essential. Future research should expand the scope to additional municipalities and incorporate the citizen perspectives to further enrich an understanding of the AI's role in the local governance. This study contributes to the theory and practice in a number of ways. Ideally, it expands the knowledge on the use of technology within the municipalities of developing counties, especially on the associations between the various areas of readiness. The methodology provides the ways to measure the AI preparedness on a ward scale, and the tools offered can be applied to any other scenario. In practice, it provides the practical tips to the municipal governments that are on the path of digital transformation.

There are a number of limitations that ought to be recognized. The fact that the study is based on two wards, although which it is quite in depth, does not help much in generalization. The self-report measures can be biased but the methodological triangulation prevented this issue. The cross-sectional design relays a point of readiness and digital transformation is dynamic. These limitations should be overcome in future research in terms of the longitudinal design, multiple case studies, and the inclusion of the citizen perspective.

Nevertheless, the study is informative to Pokhara Metropolitan City and other similar cities that are planning to adopt AI. The strategic framework provides a sustainable implementation roadmap, stating that the development of technology should be accompanied by the institutional development and capacity building of individuals. With these Nepali municipalities facing the challenges of federalization and growing service demands, a careful use of AI is not only a technology decision but also a strategy to foster more responsive, efficient, and transparent government.

CONFLICT OF INTEREST

The author declares no conflict of interest. This research was conducted independently without financial, political, or personal relationships that could inappropriately influence the study's findings or interpretations.

AUTHOR CONTRIBUTIONS

I declare that this manuscript is my original work.

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