EVEREST COLLEGE

Thapathali, Kathmandu

Case Study of E-Governance (CACS - 409)

For the partial fulfillment of Bachelor's Degree of Computer Application

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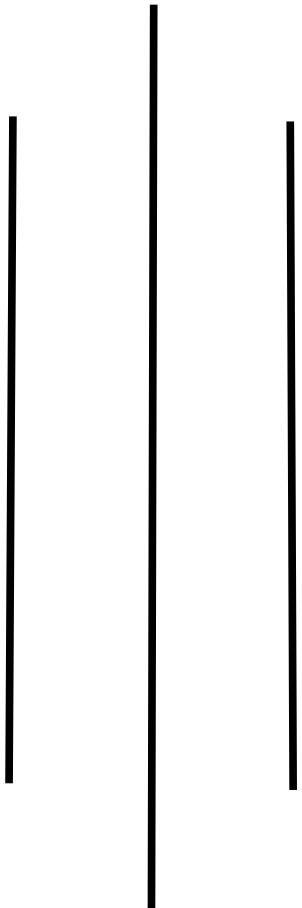
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DIGITAL GOVERNANCE IN NEPAL: A CASE STUDY OF THE NAGARIK APP

Subject Name: E-Governance (CACS - 409)

Bachelor of Computer Application (BCA), 7th Semester

ABSTRCT

This study examines Nepal's Nagarik App, a national initiative aimed at advancing digital governance. The app was developed to centralize public services, reduce paperwork, and enhance transparency in government processes. The research investigates citizen awareness, service efficiency, adoption challenges, and the roles of key stakeholders in shaping the platform. Employing a mixed-method approach, the study combines user feedback with secondary data from government reports and digital governance evaluations. Findings indicate that while the Nagarik App has improved convenience and accessibility for many citizens, technical issues, data discrepancies, and uneven digital literacy continue to limit its overall impact. The study concludes with recommendations to strengthen system integration, enhance user support, and bolster long-term policy readiness.

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

Digital governance has become a cornerstone of modern public administration, as governments increasingly leverage technology to enhance transparency, reduce delays, and simplify access to public services. In line with this trend, Nepal launched the Nagarik App, a unified mobile platform that consolidates multiple government services. Through the app, citizens can apply for a PAN number, access education records, view social security information, and download vaccine certificates. The platform is also designed to minimize in-person visits to government offices, reduce queues, limit intermediaries, and provide reliable digital records of public services.

While the Nagarik App represents a significant milestone in Nepal's digital transformation, it remains a work in progress. Service integration is ongoing, and the platform faces challenges related to connectivity, data accuracy, and public awareness. Certain features are still under development, and not all government agencies are fully connected. Despite these limitations, the app demonstrates the potential of digital tools to make government processes more accessible and support more effective planning. As additional services are integrated and the system stabilizes, the Nagarik App is poised to become a central and trusted gateway for citizens to engage with government services.

1.2 Relevance to the Subject

This study examines digital governance, public service management, and technology integration, using Nepal's Nagarik App as a practical example of how digital tools can transform the relationship between citizens and the state. By consolidating key government services—such as PAN registration, education records, social security information, and vaccine certificates—into a single platform, the app simplifies access and reflects broader trends in e-governance and ICT for development.

The platform reduces paperwork, limits delays, and enhances transparency, demonstrating the potential benefits of digital public services. At the same time, its gradual rollout highlights the challenges of transitioning from traditional administrative processes to a

fully digital system. Factors such as data accuracy, system integration, network reliability, and public awareness continue to affect its overall effectiveness.

Despite these challenges, the Nagarik App illustrates how digital platforms can streamline services, reduce the need for physical visits to government offices, and strengthen public trust. It also offers valuable insights into how developing countries can leverage technology to modernize administration. As additional features are integrated and the system matures, the app is poised to become a central and reliable gateway for citizens to engage with government services.

1.3 Problem Statement

Despite its potential, the Nagarik App faces several challenges that limit its effectiveness:

1. Users frequently encounter verification issues, making it difficult to access services smoothly.
2. Server delays and data mismatches reduce the platform's reliability.
3. Limited internet connectivity in rural areas prevents many citizens from using the app effectively.
4. Uneven digital literacy across the country creates barriers for a significant portion of the population.
5. There is a need to assess citizen awareness, service quality, adoption challenges, and stakeholder roles to ensure that the app delivers its full benefits.

CHAPTER 2: OBJECTIVES

The study aims to understand how the Nagarik App supports Nepal's digital governance goals. The objectives are structured to capture citizen experience, system performance, adoption challenges, and the broader context in which the platform operates.

2.1 To Examine Citizen Awareness and Engagement with E-Governance

- Measure how many citizens know about the Nagarik App.
- Identify how often users access the app and which services they use.
- Understand the level of trust and comfort citizens have with digital platforms.

2.2 To Assess the Efficiency and Effectiveness of E-Governance Services

- Evaluate whether the app reduces waiting time and paperwork.
- Compare service delivery speed with traditional methods.
- Examine improvements in accuracy, transparency, and ease of use.

2.3 To Identify Barriers to Adoption and Inclusivity

Even with available platforms, not all citizens benefit equally. These objectives highlight obstacles that prevent widespread use:

- Identify technical issues such as login problems and server delays.
- Examine limitations related to internet access and smartphone availability.
- Assess digital literacy challenges among different age or regional groups.
- Understand concerns related to data privacy and security.

2.4 To Explore the Role of Stakeholders in Supporting E-Governance

This objective examines how different actors contribute to the success or failure of digital initiatives:

- Examine the responsibilities of government agencies involved in the app.

- Assess the role of telecom providers in user verification.

- Understand the contribution of developers, IT teams, and cybersecurity units.

- Review how citizens themselves influence adoption and usage.

2.5 To Suggest Practical and Context-Sensitive Recommendations

The final objective moves beyond analysis to actionable solutions tailored to Nagarik App's unique environment:

- Examine the responsibilities of government agencies involved in the app.

- Assess the role of telecom providers in user verification.

- Understand the contribution of developers, IT teams, and cybersecurity units.

- Review how citizens themselves influence adoption and usage.

These recommendations aim to strengthen digital governance and ensure equitable access for all residents.

Why These Objectives Matter

These objectives are crucial for assessing whether the Nagarik App is effectively serving citizens as intended. Understanding public awareness and usage provides insights into the platform's acceptance and highlights areas where outreach or digital literacy support may be needed. Evaluating service efficiency helps determine if the app genuinely improves speed, convenience, and transparency compared to traditional government procedures. Identifying adoption barriers is essential, as many citizens still face challenges related to internet connectivity, digital skills, and data accuracy, which can limit the app's accessibility and fairness. Finally, offering practical recommendations ensures that the study translates into actionable improvements, enabling the government to strengthen the platform, expand services, and foster a more effective and inclusive digital governance system.

CHAPTER 3: METHODOLOGY

The methodology for this case study is designed to capture the real-world conditions of digital governance in Nepal, where traditional administrative practices are gradually merging with modern technology. The Nagarik App operates at a national level, connecting citizens from diverse regions, backgrounds, and levels of digital readiness. This approach combines user experiences, technical insights, and system-level challenges to present a complete and realistic picture of how the app functions in everyday life. By blending citizen perspectives with data from government sources and technology partners, the methodology provides a balanced understanding of the strengths, limitations, and evolving nature of the Nagarik App within Nepal's broader digital transformation.

3.1 Research Design: Mixed-Method Approach

The study uses both qualitative and quantitative techniques. Surveys and interviews provide insight into user experience, while secondary data adds context and comparative understanding.

3.2 Data Sources

Primary Data: Citizen and Staff Perspectives

Primary data includes responses from individuals who use or support the app. These include:

- Interviews with citizens who rely on the app for services
- Discussions with government staff involved in digital service delivery
- Observations of common issues raised by users during verification or login

This data helps capture real experiences that numbers alone cannot explainSecondary Data: Reports and Benchmarking.

Secondary Data: Reports and Benchmarking

Secondary data includes documents and reports that track the progress of digital governance in Nepal. These sources include**:**

- Government policy documents
- Reports from the National Information Technology Center (NITC)
- Media articles, research papers, and case studies
- Comparative studies on e-governance in South Asia

3.3 Tools and Techniques

The study uses several tools to gather and interpret information, such as:

- Structured and semi-structured questionnaires

- Interview guides tailored for users and officials

- Review of service usage statistics from previous reports

- Thematic analysis to identify recurring patterns in user feedback

- Basic statistical tools to summarize survey findings

3.4 Data Analysis

Data is analyzed through a combination of statistical and thematic methods. Quantitative responses are organized into clear categories such as usage frequency, service satisfaction, and technical issues. Qualitative responses are reviewed to identify themes such as trust, convenience, frustration, or accessibility challenges. This combined analysis allows the study to draw meaningful conclusions 2about how well the Nagarik App is functioning and what improvements may be needed.

CHAPTER 4: CASE DESCRIPTION

4.1 Background Information: Nagarik App

Nepal has been actively working to digitize public services to reduce intermediaries, save time, and enhance transparency. The Nagarik App is one of the country's first large-scale digital initiatives designed to provide citizens with direct access to government information. It centralizes services from multiple ministries and departments into a single mobile application, streamlining interactions between the government and the public.

4.2 Stakeholders Involved: Key Actors in the Nagarik App Ecosystem.

The development, maintenance, and use of the Nagarik App involve multiple stakeholders, including:

- **Ministry of Communications and Information Technology** – responsible for policy guidance and oversight.

- **National Information Technology Center (NITC)** – manages the technical infrastructure.

- **Telecom providers (NTC, Ncell, Smart)** – facilitate user verification and connectivity.

- **Government departments** – supply and maintain the data integrated into the app.

- **Software developers and cybersecurity teams** – ensure system functionality and data security.

- **Citizens** – the end-users whose engagement determines the app's success.

4.3 Challenges Identified: The Hurdles of Digital Governance.

Despite its potential, the Nagarik App faces several challenges that impact usability and effectiveness:

- Difficulty matching legacy citizenship records with digital databases.

- Verification issues during login and service access.

- Limited access for individuals without smartphones or reliable internet.

- Concerns regarding data privacy and security.

- Partial integration of some government departments, leading to incomplete service

coverage.

- Frequent server overloads during peak usage times.

CHAPTER 5: ANALYSYIS AND DISCUSSION

The Nagarik App represents one of Nepal's most ambitious steps toward digital governance. This chapter analyzes how effectively the app delivers services, how citizens perceive it, and what challenges influence its adoption. The discussion combines user experiences, technical performance, and the broader context of Nepal's digital transformation.

5.1 Citizen Awareness and Usage Patterns

Findings show that awareness of the Nagarik App has grown significantly since its launch, especially in urban areas. Many users have adopted the app for essential services like PAN registration, education record verification, and vaccine certificate downloads. However, awareness remains uneven across the country. Rural communities, older populations, and citizens with limited digital exposure tend to rely more on traditional methods. This indicates a digital divide that affects the app's overall reach. The awareness level strongly correlates with smartphone ownership, internet access, and digital literacy.

5.2 User Experience and Service Efficiency

For citizens who successfully register, the app provides a noticeable improvement in service convenience. Tasks that previously required multiple visits to government offices can now be completed within minutes. Users appreciate features such as digital identification, document access, and transparent service delivery. However, the experience is not consistent for everyone. Some users report difficulties with login verification, slow system response, and occasional app crashes. These technical issues affect trust and limit wider acceptance. Despite challenges, the app has reduced dependency on middlemen and decreased processing time for several government services, validating its role in improving efficiency.

5.3 Technical and Operational Challenges

The app's performance is closely tied to the quality of Nepal's digital infrastructure. Data mismatches between old citizenship records and digital databases remain a major hurdle. This leads to failed registrations, which frustrate new users. Server capacity issues cause slow performance during peak usage. Incomplete integration of government databases limits the availability of important services. Additionally, privacy concerns influence how comfortable people feel about storing personal data on a centralized digital platform. These challenges highlight the need for stronger backend systems, improved interoperability, and clearer communication about data protection.

5.4 Inclusivity and Accessibility Concerns

The app's effectiveness is closely linked to the accessibility of smartphones and stable internet connections. Many citizens in rural and remote areas struggle to use the app due to poor network coverage. Limited digital literacy makes it difficult for some individuals to understand the verification steps or navigate the interface. Elderly citizens, in particular, rely heavily on assistance.

5.5 Stakeholder Coordination and System Integration

The development and operation of the Nagarik App involve multiple stakeholders, including the Ministry of Communications and Information Technology, NITC, telecom operators, and numerous government departments. Effective coordination among these actors is essential. While progress has been made, integration is still incomplete. Some departments have not fully digitized their records, making it difficult to provide end-to-end services. For example, certain citizenship details or local-level records still require manual verification. This limits the app's potential to function as a fully unified national platform.

5.6 Public Trust and Perception

Public trust plays a major role in digital adoption. Many users view the Nagarik App as a positive step toward transparency and modernization. They appreciate having direct access

to   their   personal   records.
However, concerns remain about data privacy, cyber security, and whether government systems are capable of protecting sensitive information. These perceptions influence how confident people feel about using the app for important tasks. Without strong communication and policy assurances, trust may remain limited among certain groups.

5.7 Contribution to Nepal's Digital Transformation

Despite challenges, the Nagarik App has made meaningful contributions to Nepal's evolving digital ecosystem. It has encouraged citizens to engage with digital services and created a foundation for future e-governance initiatives. The app demonstrates how centralized digital platforms can simplify public service delivery and reduce bureaucratic delays. Its success also highlights the importance of modern IT infrastructure and coordinated institutional support.

CHAPTER 6: RECOMMENDATIONS

Based on the analysis of Lalitpur Metropolitan City's (LMC) e-governance initiatives, the following recommendations aim to address barriers, enhance adoption, and make digital services inclusive for all citizens:

6.1 Short-Term Recommendations

- Fix data mismatches between citizenship and telecom databases
- Improve server speed and stability
- Add in-app help guides and live support
- Run digital literacy and awareness campaigns
- Improve transparency about data protection

6.2 Long-Term Recommendations

- Full integrate more government services into the app

- Strengthen digital infrastructure in rural areas

- Update national data systems and link them more effectively

- Develop strong data privacy regulations

- Promote digital skills through schools and community programs

CHAPTER 7: CONCLUSION

The Nagarik App represents a significant milestone in Nepal's journey toward modern digital governance. By consolidating key government services into a single platform, it enables citizens to access information and complete administrative tasks without visiting multiple offices. For many users, particularly in urban areas, the app has already reduced waiting times, increased transparency, and enhanced the efficiency of service delivery.

However, the user experience is not uniform across the country. Technical issues, incomplete data integration, and server limitations continue to affect accessibility and performance. Citizens in rural areas face challenges related to internet connectivity and digital literacy, which restrict their ability to fully benefit from the system. Additionally, concerns about privacy and data protection influence public confidence in using the app for sensitive information.
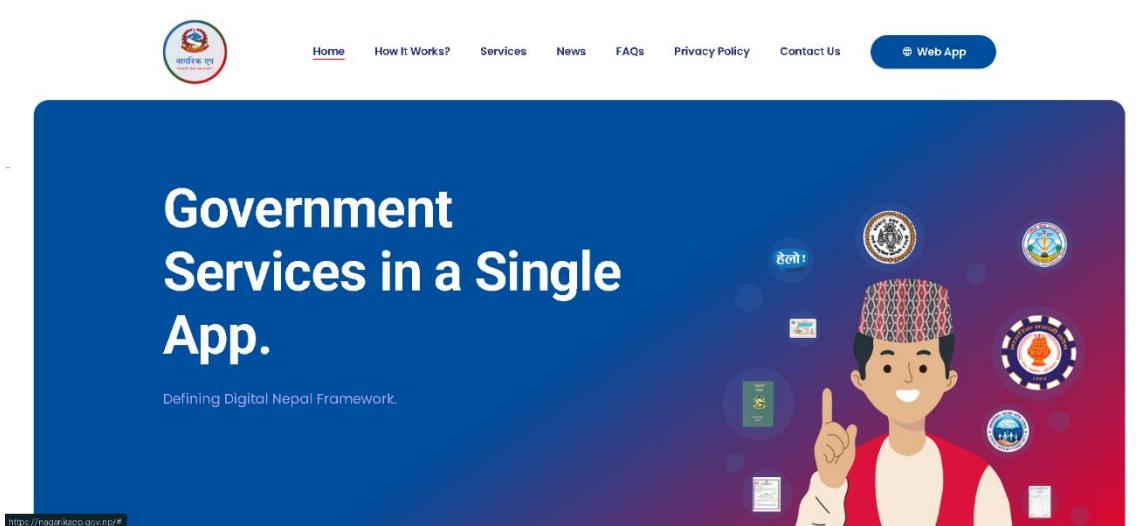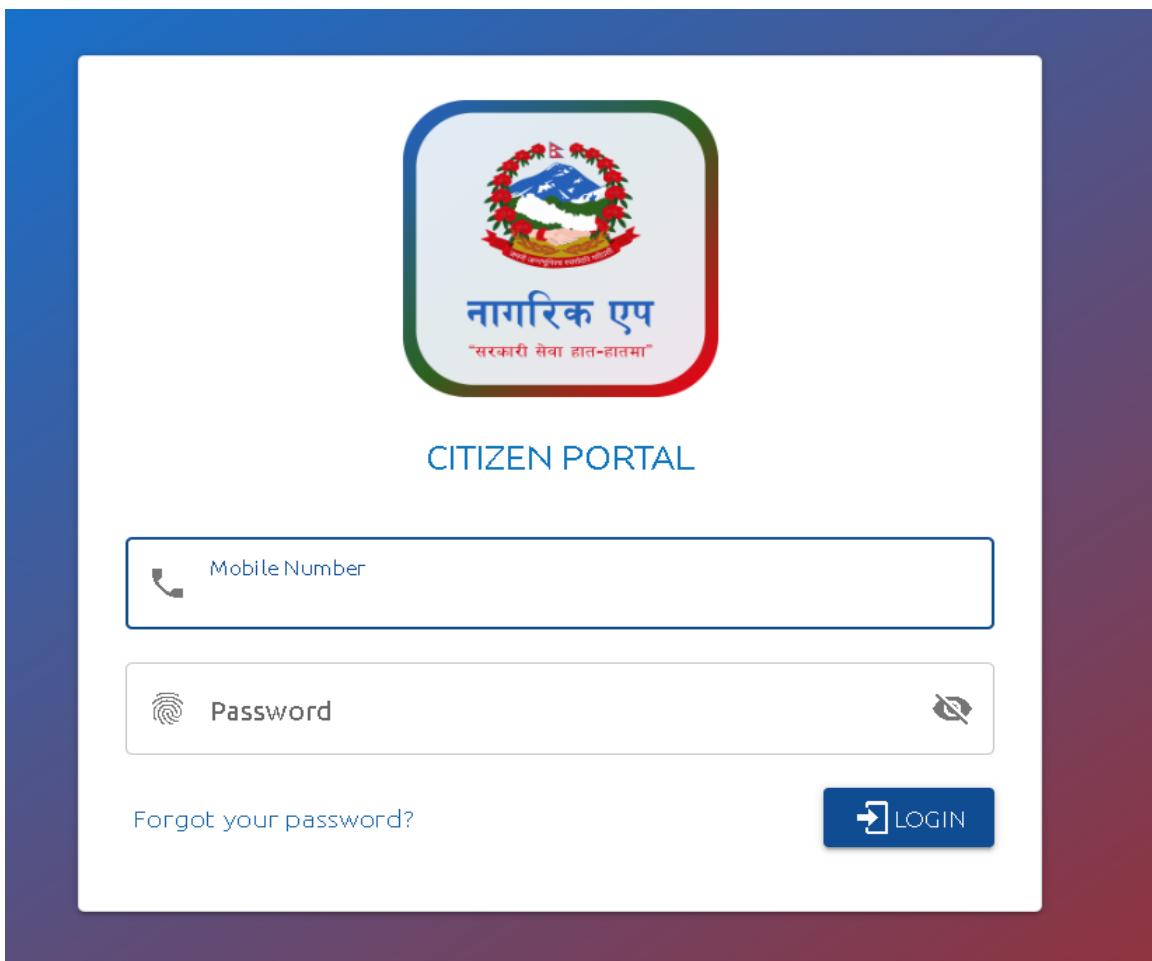
Despite these challenges, the Nagarik App demonstrates strong potential. It has established a foundation for a more connected, accountable, and citizen-centered public service system. With improvements in infrastructure, better coordination among government agencies, and clear communication regarding data security, the app can evolve into a reliable national platform. Continuous updates, user education, and comprehensive integration of government databases will be crucial for its long-term success.

Overall, the Nagarik App illustrates how digital tools can simplify everyday services and foster a more citizen-focused government. Its progress reflects both the opportunities and the responsibilities inherent in Nepal's digital transformation.

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APPENDICES
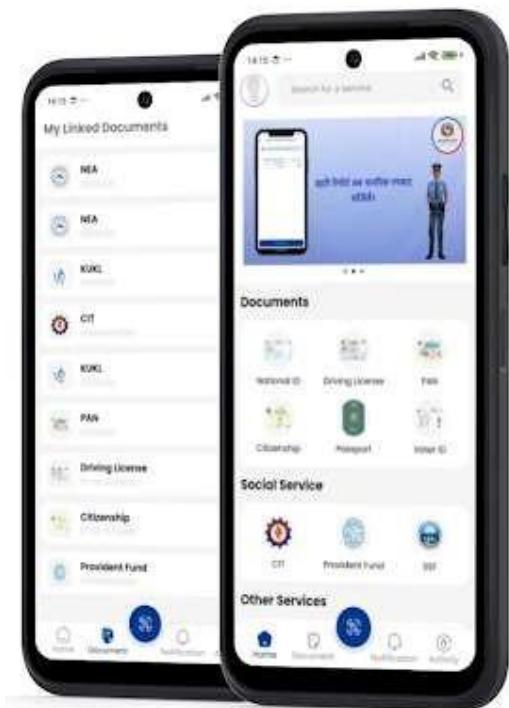
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Government Services
in Single App

Explore
Nagarik App

Get PAN Card
in a minute

How it works?

OTP Verification

Mobile Number verification through OTP.

Citizen Verification

Citizen must verify his/her identity to link them to Nagarik App.

Enjoy App

Enjoy government services in single app.

And many more features/services

More than 30 government features/services available currently

|		
Citizenship	Passport	Voters Card
IRD PAN	Social Security Fund	Citizen Investment Trust
Lok Sewa	+2 Details	Hello Sarkar
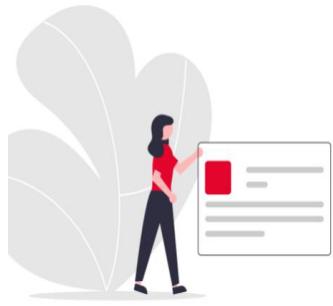
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