

Digitalization of Government Services and Citizen Satisfaction: A Case Study in Dhankuta District, Nepal

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Abstract

This study, conducted in the context of Nepal's Digital Nepal initiative, is of significant relevance as it evaluates citizen satisfaction with digital government services in Dhankuta District. The findings, crucial for the ongoing digital transformation in Nepal, reveal mixed satisfaction: digital services like land map printing and online revenue payments scored medium-high, indicating positive reception. However, service quality, data security, and digital awareness campaigns scored medium-low, highlighting areas for improvement. The study underscores the importance of enhancing service reliability, security, and public awareness as digital initiatives progress. Recommendations include improving user interfaces, implementing robust security measures, launching comprehensive digital literacy programs, and developing effective communication strategies to optimize digital government services in Dhankuta District.

Keywords: citizen satisfaction, digital government services, Dhankuta District, service quality, data security.

Introduction

Many developing countries, like Nepal, are grappling with extreme poverty, and significant changes in people's lives have been lacking for years. One notable reason for this stagnation is corruption. Traditional forms of governance, manual systems, unethical behavior of public servants, government procurement systems, bureaucratic delays, and red tape have all contributed to corruption. Digitalization in government work is needed to address these issues (Shah, 2023). By automating processes, enhancing transparency, and improving accountability, digitalization can reduce opportunities for corruption, streamline procedures, and make government services more accessible and efficient for citizens.

E-governance makes public administration more open, flexible, and easily accessible to citizens without requiring them to meet officials in person. However, for e-governance to be interactive and user-friendly, citizens need access to ICT facilities and basic computer skills. In other words, ICT infrastructure and computer literacy are essential ingredients for the success of e-governance (Dhakal, 2012). The digital transformation of government services represents a global movement

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aimed at enhancing efficiency and meeting the evolving needs of citizens in a rapidly changing world (Mergel, 2019).

Globally, governmental organizations have integrated digital applications to optimize their activities, achieve higher outcomes, and bring services closer to the people. In Nepal, the Digital Nepal initiative signifies a significant commitment to digitalizing government sectors to improve service delivery efficiency and transparency (P. Pradeep, 2023). Over the past decade, the efficient use of information technology in government offices in Nepal has become central to achieving the goals of effective governance, promising a brighter future for citizens.

According to the UN E-Government Survey 2022, Nepal's E-Government Development Index (EGDI) is 0.5117, ranking 125th out of 193 countries. The EGDI, a composite indicator, reflects three key dimensions of e-government: online service provision, telecommunication connectivity, and human capacity. Additionally, Nepal's E-Participation Index, which measures citizen engagement in government policy and service development, is 0.2386, placing it 143rd among 193 countries.

One of the pivotal projects under this initiative is the implementation of the National Identity Card (NID) system. This system aims to provide every citizen with a robust digital identification card, fundamentally transforming the dynamics of citizen services and bureaucratic efficiency. However, despite these advancements, challenges such as restricted access to technology, infrastructure gaps, and digital literacy persist (Janowski, 2015). Overcoming these challenges is crucial for Nepal to fully realize the benefits of digital government services. Community efforts play a vital role in bridging these gaps, facilitating partnerships between the public and private sectors to fast-track the objective inclusively (Ghimire, 2021).

This research focuses on examining the efforts of government offices in Dhankuta District, Nepal, to implement electronic service delivery and assess the impact on citizen satisfaction. Trust in e-government is essential, as a lack of confidence can hinder citizen adoption of digital services (France Belanger, 2008). Efficiency in digital services, characterized by reliability, response time, and ease of use, significantly enhances service quality. In Dhankuta District, digital services such as online land records, revenue payment systems, and digital court case registration have increased government effectiveness and efficiency.

The study aims to establish the extent to which service quality improvements impact the perceived efficiency of government service delivery and, consequently, citizen satisfaction. Trust, security, and effective feedback mechanisms are crucial for digital government services to gain citizen approval and encourage societal acceptance. Feedback from citizens is invaluable in shaping the future of digital government services. Effective governance of digital initiatives is not just important; it is essential to ensuring success and mitigating potential risks. While digitalization offers numerous benefits, such as increased accountability, efficiency, transparency, cost reduction, and improved governance, poorly designed reform strategies can hinder progress. Thus, robust governance frameworks and strategies are imperative for maximizing the potential of digitalization initiatives.

This research explores the current state of digitalization efforts in government offices in Dhankuta Municipality, Nepal. It assesses citizens' familiarity and satisfaction with these services by collecting

and quantifying their responses. By examining core digitalization services and evaluating citizens' perceptions and satisfaction levels, this study aims to provide valuable insights into the effectiveness of digital transformation initiatives in enhancing service delivery and citizen engagement.

This study combines qualitative and quantitative analyses with a mixed-methods approach to gain comprehensive insights into the digitalization landscape in government offices. Qualitative methods such as interviews and focus groups will gather in-depth perspectives from government officials and citizens. Quantitative methods, including surveys and data analysis, will provide statistical evidence on citizens' familiarity, satisfaction levels, and usage patterns of digital government services. This research was conducted thoroughly, focusing on a representative sample of government offices across various sectors and geographical locations in Nepal, capturing diverse perspectives from different regions and sectors.

Literature Review

Based on a literature review, a conceptual framework was established to identify the factors that would facilitate the implementation and adoption of e-government in Nepal. This review involved searching different research papers using online databases such as ResearchGate, Scopus, and Google Scholar, with keywords such as e-government, digital governance, Nepal, and customer satisfaction. The conceptual findings, combined with the empirical evidence obtained from these sources, provided the basis for creating questionnaires for each segment of the literature review and the research paper as a whole.

Types of Digitalization Service Initiatives in Government Offices

In October 2019, the government developed a Digital Nepal framework outlining one nation, eight sectors, and eighty digital initiatives to drive innovation, enhance productivity, enrich the quality of life for all Nepali people, and provide quick access to government services (Nepal, 2019). Nepal has made significant strides in IT infrastructure, including building a nationwide optical fiber network, implementing 4G LTE, and launching a national e-payment gateway. The 14th national plan achieved 65% internet access, with the 15th plan targeting 80% by 2023-2024. The COVID-19 pandemic boosted virtual communication despite economic challenges. However, expanding and managing IT infrastructure remains difficult. Nepal needs to develop innovative human resources through multilateral partnerships to enhance government service delivery (Shah, 2023).

Various initiatives have been launched across different government sectors as part of the additional digitalization work process. Government offices have digitized their services with two primary objectives: maintaining transparency and providing public services smoothly, effectively, and quickly. The digitalization of work in Nepal has advanced significantly, particularly with the launch of the Nagarik App in January 2021, which integrates all government services for easy, round-the-clock online access to essential documents and public services. Mero Kitta, an application from the Department of Survey, allows users to print land maps and field guides at home, reducing bribery and waiting times at survey offices (Ghimire, 2021). The banking sector has also adopted digitalization with Connect IPS, an e-payment service launched by Nepal Clearing House Limited (NCHL) in 2018, facilitating online fund transfers and e-commerce transactions. The Digital Nepal Campaign, initiated in 2018, included a national identity card to replace the citizenship card and

improve access to state services. Additionally, the digital signatures introduced in 2016 enhanced the security of digital documents. Achieving the goals of Digital Nepal requires public-private partnerships and coordinated efforts across all government levels (Ghimire, 2021).

Research question: What digitalization service initiatives are currently being implemented in government offices?

Service Quality and Effectiveness

Digital governance ensures effective service delivery to the public, but countries like Nepal still face challenges in this area. Digitalization facilitates interaction in different modules: government to government (G2G), government to citizen (G2C), and government to business (G2B). These modules are in the development phase of the Nepalese digital era (Joshi, 2020). Service quality plays a crucial role in determining the efficiency of government services and ultimately influences citizen satisfaction. Research emphasizes the significance of factors such as tangibility, reliability, responsiveness, assurance, and empathy in determining functional quality, while valence and waiting time are critical factors for technical quality (Raghavendra D. Padiyar, 2022). Additionally, studies highlight the importance of citizen feedback in analyzing service quality, with factors such as efficiency, quality, attitude, compliance, and execution of responses as key determinants (Xiaoyan, 2023). Overall, citizen satisfaction is not only a measure of government performance but also a means of enhancing public values such as accountability, trust, and social equity (Kim, 2022).

Research Question: How do service quality and effectiveness impact the efficiency of government services and citizen satisfaction?

Perceived Impact on Accessibility of Government Services

The perceived impact is the level of satisfaction of the citizens with the concerned programs and the overall success rate of the digital initiatives executed by the government. Remote access to government services plays a significant role in enhancing the customer experience in public sector services. Everyone should be able to access these services regardless of location or disability status. Research conducted by Viswanath Venkatesh (2003) indicates that if ordinary citizens feel they can successfully interact with digital initiatives, their effectiveness is perceived to rise. Studies have shown that perceived e-service components, including core, facilitating, and supporting services, positively influence perceived usefulness and trust in e-government, ultimately affecting citizen satisfaction (Telly et al., 2023).

Research Question: What is the overall influence of the various perceived impacts on the accessibility of government services on citizen satisfaction?

Trust, Security, and Feedback in Government Digitalization

Trust, security, and feedback are crucial in enhancing government digitalization for citizen satisfaction. Studies (Xiaoyan, 2023) emphasize the significance of trust in e-government services, showing that trust in e-government positively influences perceived usefulness and citizen

satisfaction. Additionally, the quality of e-services, including information quality, data security, and data privacy, significantly impacts e-service quality, leading to increased user trust and satisfaction (Yayan, 2023).

Trust and security are fundamental for the adoption and success of digital government services. Citizens' trust in the government and the perceived security of digital platforms are crucial for encouraging the use of these services. Trust in the agency providing the service is essential for widespread e-government adoption, as citizens must believe in the integrity and technical capabilities of government agencies. The study "Trust and Risk in E-Government Adoption" by Belanger (2008) highlights a model guided by Ajzen and Fishbein's Theory of Reasoned Action (TRA). It explores how trust and risk perceptions influence citizens' intentions to use e-government services. The findings support the positive influence of trust in the Internet, the government, and the disposition to trust in use intentions while highlighting the role of perceived risk (France Belanger, 2008).

Research Question: *How do trust, security, and feedback contribute to government digitalization for citizen satisfaction?*

Digital Awareness and Knowledge in Citizen Satisfaction

Digital awareness and knowledge play crucial roles in citizen satisfaction, especially in the context of e-government services. Studies have shown that factors such as ease of use, usefulness, information awareness, and trust in e-government significantly affect citizen satisfaction (Yanying, 2017). Additionally, research on digital financial awareness (DFA) in India highlights the importance of digital accessibility in enhancing satisfaction with financial services, indicating significant differences in satisfaction levels based on geographical location and age groups. Perceived e-service, encompassing core, facilitating, and supporting services, positively influences perceived usefulness and trust in e-government, impacting citizen satisfaction. This study confirms that perceived usefulness is critical to citizen satisfaction with e-government services. It emphasizes the significance of perceived e-service as an antecedent in shaping citizen satisfaction, highlighting the pivotal role of e-service perceptions in enhancing user experience and trust in government services (Telly P. U., 2023).

Research Question: *How do digital awareness and knowledge affect citizen satisfaction?*

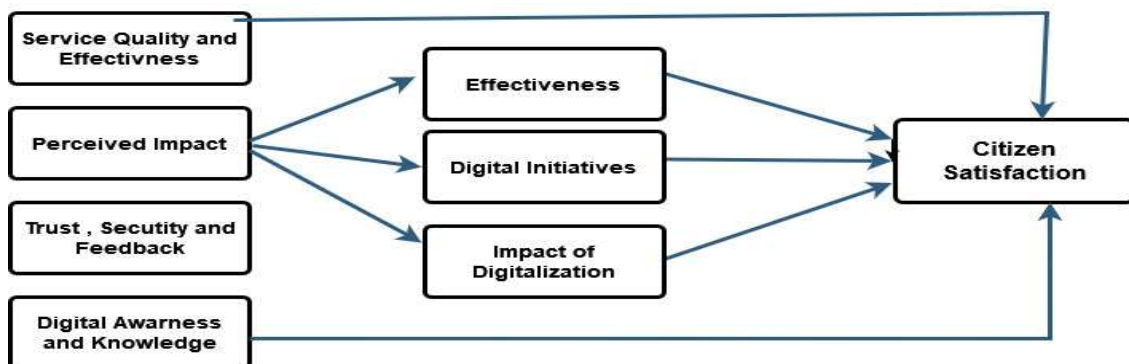


Figure 1 : Conceptual Research Framework

The conceptual framework presented in the above diagram illustrates the various factors contributing to citizen satisfaction in the context of digital government services. It identifies four primary constructs: Service Quality and Effectiveness, Perceived Impact, Trust, Security and Feedback, and Digital Awareness and Knowledge. These constructs influence three intermediate factors: Effectiveness, Digital Initiatives, and Impact of Digitalization, collectively leading to overall Citizen Satisfaction.

Service Quality and Effectiveness directly enhance the perceived impact and effectiveness of digital initiatives. Trust, Security, and Feedback play a crucial role in shaping the impact of digitalization and citizens' trust in these services. Digital Awareness and Knowledge ensure that citizens are well-informed and can efficiently utilize digital services, further contributing to satisfaction. Ultimately, the interplay between these constructs and intermediate factors improves citizen satisfaction with digital government services.

This framework underscores the importance of a holistic approach in evaluating and enhancing digital services to achieve higher levels of citizen satisfaction.

Research Objectives

- To identify and assess the types of digitalization service initiatives currently implemented in the government offices of the Dhankuta District.
- To analyze how service quality and effectiveness impact the efficiency of government services and their influence on citizen satisfaction.
- To evaluate the overall impact of various perceived factors on the accessibility of government services and how these factors contribute to citizen satisfaction.
- To investigate how trust, security, and feedback mechanisms influence the adoption and effectiveness of government digitalization efforts to enhance citizen satisfaction.
- To examine the role of digital awareness and knowledge in influencing citizen satisfaction with government services.

Methodology

This study used a mixed-methods design to assess the impact of digitalization initiatives on citizen satisfaction in Dhankuta District, Nepal. Dhankuta was chosen as the focal point of this study due to its role as a regional administrative hub, making it a prime location for digital transformation efforts. By examining Dhankuta's initiatives, we aim to extract valuable insights into nationwide digitalization strategies.

This study integrates quantitative surveys and qualitative interviews to analyze the variables influencing satisfaction with digital government services. The offices chosen were based on the high volume of daily service users, ensuring that the sample represented the district's most frequented public service points. A total of 168 service recipients were surveyed, with 85% of the questionnaires collected through field visits and the remainder via Google Forms, ensuring

inclusivity. Non-probability sampling was employed, and the questionnaires were translated into Nepali to ensure participants could understand them.

Additionally, qualitative data were gathered through interviews with officers and staff to explore the digital initiatives mandated by the Central Government. Data collection involved structured questionnaires using a 5-point Likert scale and interviews during field visits. Quantitative data were analyzed using SPSS and Excel, employing descriptive and inferential statistics, while qualitative data were analyzed thematically.

Results and Discussion

Key Developments and Initiatives

The following table (Table 1) was generated to achieve research objective one, providing an overview of digitalization initiatives in government offices, total human resources, IT experts, and per-day service delivery from three sampled government offices in Dhankuta District, Nepal. The table was constructed based on qualitative questionnaires administered to the sampled government offices. The snippets of the qualitative questionnaires used are as follows:

- Which digital services are currently available in your office for citizens to access?
- What are the current digital initiatives that citizens can avail themselves of from this office?
- How many IT experts are employed in your office to support and maintain these digital services?

Table 1: Digitalization efforts undertaken by government offices in Dhankuta District.

Name of government office	Digitalized work	Total Human resource	IT expert staff	Per-day service deliver
District Survey Office Dhankuta Nepal	Land Map digital print: This allows for easy access to digital maps of land areas.	22	15	200 Per day
	Partial transaction: Some transactions related to land can be completed digitally.			
	Land field book print: Digital printing of land field books for convenient access.			
	Online revenue payment: People can pay land revenue online, eliminating the need for physical visits.			
	Token system: Implementing a token system ensures efficient and organized service delivery.			
	Using PAMS software: This software helps manage land-related data and transactions.			
	Accounting professionals using software:			

Land Revenue Office Dhankuta Nepal	Digital tools facilitate accounting tasks.			
	Land identification number: Each land is assigned a digital identification number for easy reference.	25	17	100-200 per day
	Landowner certificate digitalized: Digitizing landowner certificates simplifies record-keeping.			
	Online revenue payment: Payments for land-related transactions can be made online.			
	Online transaction details of land owner: Digital records of transaction details for land owners			
District Court Dhankuta Nepal	Case Management System Software (CMS): Software to manage court cases efficiently.			
	Court Case (Issue) Online Registration: Online registration of court cases.	31	30	20-30 cases per day
	Online Registration for Court Appearances: Digital registration for court appearances.			
	Missil: The missile system for court proceedings is now digitized.			
	Video Conference for Witnesses: Witnesses can participate in court proceedings via video conference.			
	Online Entry for Reconciliation: Digital entry of reconciliation records.			
	Digitalization of All Court-Related Tasks: All work regarding the court is digitized. 3.5			

Source: Field Survey data, May 2023

From an interview with the respective heads of government offices (District Survey Office, District Land Revenue Office, and District Court Office) in Dhankuta in May 2023, it is evident that digitization has significantly streamlined government operations and enhanced services for the general public. For instance, the Land Revenue Office can now accurately record data and ensure error-free payment of capital gains tax. Tax collection has become more efficient, and data storage

has been simplified through the use of various application software and cloud storage (P. Pradeep, 2023).

Likewise, the District Survey Office has expanded its range of services to the public. Simultaneously, the District Court can conduct video conferences, eliminating the necessity for physical presence of witnesses. This transition towards digitalization is underway across multiple government agencies, facilitating easier access for ordinary citizens to government services and enhancing their benefits. Overall, the digitization of government offices in Dhankuta District has boosted efficiency, minimized errors, and enhanced service delivery to the general public.

The following table delineates the level of digitalization within the sampled offices, alongside the allocation of human resources to IT. The presence of IT experts is crucial for maintaining and enhancing service delivery through the digitalization of official tasks, ensuring efficient service provision to citizens.

Table-2 : Demographic information of the respondent (n=168)

Demographic variables	Categories	Percentage of Respondents
Gender	Male	82
	Female	18
Age	Less than 24	9
	25-34	23
	35-44	31
	44-54	25
	54 and above	12
Education Level	Junior School or below	7
	High school or technical	23
	Secondary school	43
	Bachelor Degree	17
	Postgraduate Degree	10
Attend any digital initiative program	Yes	5
	No	95
Occupation	Employed	21
	Self- Employed	26
	Foreign-Employed	33
	Unemployed	9
	Retired	11
Digital Literacy	High	13
	Moderate	37
	Low	41
	Not Applicable	9
Location of Residence	Urban	14
	Suburban	57
	Rural	29

Frequency of Travel Government office	Regular	44
	Sometimes	38
	Rarely	18

Upon analyzing demographic variables, key insights emerge regarding respondent profiles. Notably, 82% are male, indicating a gender disparity. Diverse occupational backgrounds, including retirees, suggest services should cater to various citizens. Age distribution varies, with 25-34-year-olds being the largest group (33%). Digital literacy is crucial, with 41% reporting low proficiency and 37% moderate skills, highlighting the need for user-friendly interfaces and literacy programs. A majority reside in suburban areas (57%), emphasizing equitable access. Lastly, a low participation rate (5%) in awareness programs indicates a need for improved public awareness of government digitalization efforts.

Table 3 : Survey Results on Digital Government Services

Features	Questioners	Percentage		
		YES	NO	Not Sure
Digital Awareness and Knowledge	Are you aware of the digitalization initiatives implemented by the government office?	25	40	35
	How knowledgeable are you about the digital services offered by the government office?	21	53	26
	Have you used any of the digital services provided by the government office?	63	17	20
	Do you feel easy to access these digital services?	72	10	18
Perceived Impact	Do you believe that digitalization improved the transparency of government processes?	56	14	30
	Do you believe that digital transformation has enhanced the efficiency of government service delivery?	67	13	20
	Have you noticed positive changes in government employee in the accountability of their official work?	14	27	61
Service Quality and Effectiveness	Do you find government services through digital platforms more efficient than traditional methods?	63	17	20
	Has the digitalization of government services reduced the time it takes to complete transactions or requests?	69	10	21
	Digital transformation has reduced bureaucracy and red tape in government services.	20	13	67
	Digital technology has made it easier for citizens to access government information and services.	45	19	36
Trust,	Do you trust that your personal information is secure when using digital government services?	10	12	78

Security & Feedback	How confident are you in the security measures implemented by the government for digital services?	10	12	78
	Do you feel that the government actively seeks feedback and suggestions from citizens regarding its digital services?	10	75	15
	Have you ever provided feedback or suggestions for improvement?	83	10	7

Source: Questioners survey, 2023 May.

The table provides insights into respondents' perceptions of government digitalization initiatives, highlighting correlations among various questions. Data indicates that 25% of respondents are aware of these initiatives, while 40% are not, emphasizing the need for targeted awareness campaigns. Moreover, 63% have used digital services, indicating a positive correlation between awareness and usage. While respondents believe digitalization improves transparency (56%) and efficiency (67%), only 14% notice changes in employee accountability, suggesting a gap between perception and observable outcomes. Additionally, while 69% feel digitalization reduces transaction time, only 20% believe it reduces bureaucracy, indicating recognized efficiency gains but persistent concerns. A minimal percentage trusts personal information security (10%), highlighting a trust deficit. Despite 83% providing feedback, only 10% feel the government actively seeks it, suggesting room for more proactive engagement strategies.

Table 4 : Perceived Effectiveness of Digital Land Services

Items	Questionnaire	Response	Frequency	Percentage	Mean
PED1	The availability of digital land maps has easily improved my access to received land-related information.	Strongly Disagree	16	9.5	2.989
		Disagree	31	18.5	
		Neutral	64	38.1	
		Agree	49	29.2	
		Strongly Agree	8	4.8	
PED2	Online revenue payment options have made it easier for me to pay land-related fees.	Strongly Disagree	11	6.5	2.512
		Disagree	28	16.7	
		Neutral	34	20.2	
		Agree	58	34.5	
		Strongly Agree	37	22	
PED3	Digitalization of land owner certificates has simplified the management of land-related documents	Strongly Disagree	Nil	0	2.351
		Disagree	16	9.5	
		Neutral	75	44.6	
		Agree	29	17.3	
		Strongly Agree	48	28.6	

PED4	The use of PAMS software by the Land Revenue Office has streamlined land-related transactions.	Strongly Disagree	16	9.5	2.988
		Disagree	31	18.5	
		Neutral	64	38.1	
		Agree	49	29.2	
		Strongly Agree	8	4.8	

The survey findings unveil varied satisfaction levels among citizens in Dhankuta District regarding government digitalization initiatives. Notably, online revenue payment options garnered substantial approval, with 56.5% finding it more accessible to pay land-related fees, suggesting successful implementation. Conversely, for digital landowner certificates, 44.6% remained neutral, hinting at a lack of awareness about its benefits, emphasizing the need for better communication. Moreover, responses regarding digital land maps and PAMS software indicate discontent, implying unmet expectations or usability issues. These findings underscore the need for design and implementation improvements of digital initiatives to enhance citizen satisfaction and effectiveness.

Table 5 : Perceived Impact of Digital Initiatives

Items	Questioners	Response	Frequency	Percentage	Mean
PDI1	The implementation of the token system has improved service efficiency in the government office of Dhankuta District	Strongly Disagree	5	3	2.315
		Disagree	29	17.3	
		Neutral	30	17.9	
		Agree	54	32.1	
		Strongly Agree	50	29.8	
PDI2	The availability of digital court case registration and video conferencing at the District Court has made legal proceedings more convenient.	Strongly Disagree	13	7.7	2.553
		Disagree	14	8.3	
		Neutral	68	40.5	
		Agree	31	18.5	
		Strongly Agree	42	25.0	
PDI 3	Digitalization of court proceedings through the Missil system at the District Court has improved the accuracy of legal records.	Strongly Disagree	16	9.5	2.872
		Disagree	29	17.3	
		Neutral	56	33.3	
		Agree	52	31.0	
		Strongly Agree	15	8.9	

The survey data reveals that a considerable majority (around 62%) perceived improved service efficiency in government offices due to the token system implementation, indicating a positive impact. However, around 20.3% expressed disagreement, signaling some dissatisfaction. Similarly, while approximately 43.5% found digital court case registration convenient, 48.8% remained neutral or dissatisfied. The Missile system garnered relatively positive feedback, with 39.9% agreeing on improved accuracy, yet 26.8% disagreed. These results suggest varying satisfaction levels across digital initiatives, with room for improvement.

Table 6 : Perceived Impact of Digitalization on Government Services

Items	Questioners	Response	Frequency	Percentage	Mean
PID1	Overall, the digitization of government offices in Dhankuta District has positively impacted the efficiency and quality of government services.	Strongly Disagree	8	4.8	2.429
		Disagree	29	17.3	
		Neutral	36	21.4	
		Agree	49	29.2	
		Strongly Agree	46	27.4	
PID2	Digitalization initiatives have improved the accuracy of government records and transactions.	Strongly Disagree	13	7.7	2.536
		Disagree	13	7.7	
		Neutral	67	39.9	
		Agree	33	19.6	
		Strongly Agree	42	25.0	
PID3	Digital tools and software used by government offices have made it easier for citizens to interact with these offices.	Strongly Disagree	11	6.5	2.381
		Disagree	27	16.1	
		Neutral	27	16.1	
		Agree	53	31.5	
		Strongly Agree	50	29.8	
PID4	The availability of digital land identification numbers has simplified land-related processes for citizens.	Strongly Disagree	Nil	0	2.417
		Disagree	17	10.1	
		Neutral	78	46.4	

Agree	31	18.5
Strongly Agree	42	25.0

The data from Table 6 highlights respondents' perceptions of the digitization of government services. A significant percentage agreed (27.4%) or strongly agreed (29.2%) on the positive impact of digitization, indicating overall satisfaction. Similarly, 44.6% acknowledged improved accuracy in government records and transactions, yet 47.6% expressed neutrality or dissatisfaction, suggesting mixed views. Notably, 29.8% strongly agreed, and 31.5% agreed on the ease of interaction with government offices through digital tools, while 22.6% expressed dissatisfaction. Regarding digital land identification numbers, 43.5% perceived simplified land-related processes, contrasting with 56.5% expressing neutrality or dissatisfaction. The mean scores help interpret the mixed perceptions, indicating areas for improvement in enhancing citizen satisfaction with digital government services.

Table 7 : Citizen Satisfaction Survey

Items	Questionnaire	Response	Frequency	Percentage	Mean	SL
CSS1	The digitalization services of the Land Revenue Office have made me satisfied.	Very dissatisfied	21	12.5	3.03	MH
		dissatisfied	38	22.61		
		Neutral	43	25.59		
		Satisfied	49	29.17		
		Very satisfied	17	10.12		
CSS2	The availability of a digital system for official work at the District Court has made it easy for me to complete my work on time.	Very dissatisfied	16	9.52	3.05	MH
		dissatisfied	36	21.43		
		Neutral	56	33.33		
		Satisfied	41	24.40		
		Very satisfied	19	11.32		
CSS3	The digitalization process at the District Survey Office has overall satisfied me.	Very dissatisfied	11	6.55	3.08	MH
		dissatisfied	41	24.41		
		Neutral	58	34.52		
		Satisfied	39	23.21		
		Very satisfied	19	11.31		
CSS4	The service quality and effectiveness of the government offices have made me happy with the work I receive.	Very dissatisfied	26	15.47	2.57	ML
		dissatisfied	59	35.12		
		Neutral	53	31.54		
		Satisfied	21	12.5		
		Very satisfied	9	5.37		

CSS5	I trust the security of data storage and confidentiality of government work.	Very dissatisfied	26	15.47	2.68	ML
		dissatisfied	59	35.12		
		Neutral	43	25.59		
		Satisfied	23	13.69		
		Very satisfied	17	10.12		
CSS6	Digital awareness campaigns and knowledge have made it easier for me to work with government offices.	Very dissatisfied	33	19.65	2.46	ML
		dissatisfied	65	38.69		
		Neutral	38	22.62		
		Satisfied	24	14.28		
		Very satisfied	8	4.76		

(Where M.H= Medium high satisfaction, M.L = Medium low satisfaction)

The results of the citizen satisfaction survey in Dhankuta District indicate a mixed level of satisfaction among respondents regarding various aspects of digital government services. The graphical presentation clearly depicts the satisfaction level of citizens.

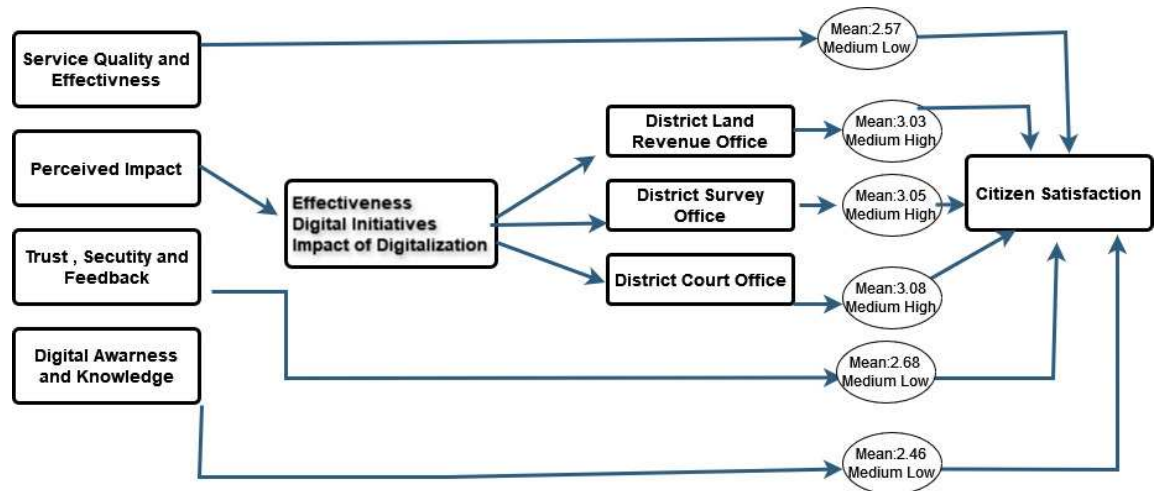


Figure 2: Citizen Satisfaction Mean Score

The citizen satisfaction survey conducted in Dhankuta District reveals a nuanced spectrum of satisfaction levels among respondents regarding various facets of digital government services. Utilizing the interpretation of mean scores as outlined by Nunnally (1994), the paper has categorized satisfaction levels into four tiers: low satisfaction (mean value 1-2), medium-low satisfaction (2.01-3), medium-high satisfaction (3.01-4), and high satisfaction (4.01-5). This categorization framework aids in comprehending the results of subscales and identifying existing gaps.

The findings of this study, based on the mean scores categorized in the paper, suggest that digitalization services and accessibility have generally been positively received, as evidenced by CSS1, CSS2, and CSS3, with mean scores of 3.03, 3.05, and 3.08, respectively, indicating medium-high satisfaction with the utilization of government office digitalized services. However, CSS4, CSS5, and CSS6 underscore areas warranting improvement, particularly in service quality, trust in data security, and the efficacy of digital awareness campaigns, with mean scores of 2.57, 2.68, and 2.46, respectively, signifying medium-low satisfaction.

Discussion

The mixed satisfaction levels observed in this study underscore the complexity of digital transformation in government services. The positive feedback for certain services indicates that digitalization can effectively enhance service delivery, streamline processes, and improve accessibility. For instance, the implementation of digital systems for land management and revenue collection has simplified these processes for the citizens, as reflected in their medium-high satisfaction scores.

Moreover, the effectiveness of digital awareness campaigns has been questioned, with many respondents indicating medium-low satisfaction. This suggests a need for more comprehensive and engaging initiatives to educate citizens about the benefits and usage of digital services. Enhanced communication strategies could bridge this gap, ensuring citizens are well-informed and confident using these services.

E-governance has been highlighted as an effective means of governance in Nepal since the first I.T. policy in the year 2000. However, some historical landmarks, such as the establishment of the National Computer Center (NCC) in 1974, have been highlighted in different scholarly articles (Joshi, 2020). E-governance has the capability to bring about a major shift in the way public administration functions (Giri, 2019). Findings concluded by recommending strongly that a comprehensive regulatory framework and good coordination between regulation implementation agencies of government and public acceptance make it successful. Thus, digitalization should be user-friendly with updated policy.

The findings of this study have several implications for policymakers and government agencies:

1. Service quality must be improved by ensuring that digital platforms are user-friendly, reliable, and efficient.
2. Strengthening data security protocols and communicating these measures to the public can help build trust.
3. Effective digital awareness campaigns are essential to ensuring that citizens are fully aware of and comfortable using digital services.
4. Conclusion:

The citizen satisfaction survey conducted in Dhankuta District presents a multifaceted picture of public sentiment towards digital government services. The results indicate a generally positive reception to the accessibility and functionality of digital services, as evidenced by medium-high satisfaction scores for aspects such as online systems in District Courts and Survey Offices.

Specifically, services such as land map digital printing and online revenue payments were well-received, highlighting successful implementations in these areas. However, there are notable areas of concern that warrant attention. Medium-low satisfaction scores were recorded for the effectiveness of service quality, data security trust, and digital awareness campaigns. These findings suggest that while digitalization efforts have made significant strides, critical service delivery gaps must be addressed to enhance overall satisfaction. To ensure timely achievement of the Sustainable Development Goals (SDGs), governments worldwide must harness the power of Information and Communication Technologies (ICTs). ICTs hold immense potential to enhance various aspects of societal well-being, including healthcare, education, and socioeconomic development. To facilitate this, it is imperative for governments to prioritize the utilization of broadband networks and services. By establishing a new set of connectivity targets, governments can propel progress towards the 17 SDGs, thereby fostering inclusive and sustainable development for all.

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