

# Understanding the impact of Nagarik App on behavioural intention of the citizens of Kathmandu for the transition towards e-governance – An extended UTAUT study

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## ABSTRACT

This study focuses on the residents of Kathmandu District in Nepal to understand the factors that strengthen and weaken their behavioural intention to use e-government services with the Nagarik App (a mobile application launched by the Government of Nepal in 2021) serving as a reference point for experience, a moderator. In the current digital era with increasing cyber threats alongside digital literacy, understanding the impact of trust and experience is vital. Using a quantitative descriptive research design, data from 490 respondents was collected online and analyzed with PLS-SEM to understand the impact of the four UTAUT constructs and trust on the behavioural intention. The results highlighted the significant role of facilitating conditions, effort expectancy and trust expectancy while also showing strong impact of experience as a moderator in some relationships. By emphasizing the role of trust, the study covers contemporary concerns of Kathmandu residents on the usage of digital government platforms and how Nagarik App has reshaped public perception of e-governance.

## KEYWORDS

Behavioural intention, e-governance, Kathmandu, Nagarik App, UTAUT, Trust expectancy, Nepal

## INTRODUCTION

Nepal, especially Kathmandu District, has progressed significantly in recent decades in the literacy rate and connectivity as literacy is at 76.2% in Kathmandu (National Statistics Office, 2023) and mobile broadband connectivity of entire country at 98.46% (Rana, 2023). Further, e-governance has seen notable strides in recent years in terms of EGDI (E-Government Development Index) as Nepal leaped from 125<sup>th</sup> position in 2022 to 119<sup>th</sup> in 2024 (United Nations Department of Economic and Social Affairs, 2024). The commitment of Nepal Government is also can be seen from E-Governance Master Plan in 2010; a roadmap titled Digital Nepal Framework in 2019, launch of Nagarik Application in 2021; formation of a dedicated E-Governance Board in 2022, publication of E-Governance Blueprint (Chapagain & Whale, 2025).

Despite significant steps towards e-governance, Nepal still faces challenges in terms of security, infrastructure, digital literacy, and implementation (Subedi, 2025). The Government of Nepal's push for digital governance through Nagarik App and other portals has exposed citizens to a digital service delivery channel, but there is a critical research and adoption gap. Most existing technology acceptance studies including UTAUT in Nepal have not considered the unique role the Nagarik App has played in shaping citizens' behavioral intentions (Thapa et al., 2024). Further, with increasing cybercrime and growing public concern about data security, there is a need for study of trust as well (Nepal, 2024) as it is a critical determinant in digital era (Lim & Kim, 2023; Almarzooqi & AlMarzooqi, 2024). To bridge this research gap, this study has extended the UTAUT model with trust expectancy and also examines the moderating effect of prior experience with the Nagarik App to deliver actionable insights for usage of e-governance (Wang et al., 2024).

The recent Gez-Z Revolution of Nepal in August 2025, that killed at least 74 people and left more than 2,000 injured, with the demand for the end of corruption (Adhikari, 2025) highlighted the need for accountability and transparency for good governance and end of corruption which can be achieved via e-governance (Ibrahimy & Hossain, 2023) as e-governance utilizes technologies to deliver services to citizens, thereby enhancing transparency, enforcing accountability, and adding efficiency. Many governments around the world in developing countries are striving for e-governance and its adaptation (Al-Khoury, 2021), including Nepal.

With such prevalent research gap, government efforts and the demand of the youth, the main objective of this study is to investigate the behavioural intention of citizens of Kathmandu to use e-government services from an extended UTAUT perspective, by investigating both the core constructs and the added trust factor. Further, the study aims to highlight the role Nagarik Application has played in shaping the intention as a moderator because experience with technology has shown to make significant impact on these relationships. The study has hypothesised that the UTAUT constructs and trust expectancy positively affect the behavioural intention of citizens of Kathmandu to use e-government services and that experience moderates these relationships.

### ***Theoretical Framework***

The study uses Unified Theory of Acceptance and Use of Technology (UTAUT) model by (Venkatesh et al., 2003) as its main framework. Other relevant theories that were thoroughly explored were Public Choice Theory as well as Diffusion of Innovations along with Lazy User Model and Technology Acceptance Model. UTAUT provides a comprehensive framework to study technology adoption by merging eight technology acceptance models from the past and consolidating them (Venkatesh et al., 2003), making it the best model for e-governance adoption studies with high-variance-explaining framework (Nepal, 2024). The inclusion of Social Influence and Facilitating Conditions makes UTAUT effective for public services like e-governance as organizational support and peer pressure are significant in e-governance (Almarzooqi & AlMarzooqi, 2024). This study has added trust expectancy because in a developing country like Nepal, trust of residents on technology and government has been found to be historically low (Chapagain & Whale, 2025) and hence plays a significant role in behavioural intention which has been highlighted by recent studies on adaptation of technologies (Bai & Wang, 2022; Rana et al., 2024). Further, the inclusion of moderating variables like experience makes UTAUT very effective for examining citizens' behavioural intentions toward e-governance (Venkatesh et al., 2003; Alhassan et al., 2021; Rana et al., 2023). The UTAUT theory guides the investigation to evaluate the strength of the relationships between different independent variables that impact the dependent factor (Khanal & Thapa, 2023).

### ***Review of Literature and Hypothesis***

Global studies have regularly shown that behavioural intention of people to make use of technology for government services is impacted by the four constructs of the UTAUT framework. A recent study by (Oliveira et al., 2023) highlighted that performance expectancy and trust strongly influence the e-government adoption in European countries while (Al-Shafi, 2024) concluded that influence of the society along with external conditions like infrastructure and support have high influence in less experienced users of Middle East. In Asia, experience strongly moderate relationships between adoption of e-government and UTAUT constructs (Dwivedi et al., 2022). A lot of global recent studies have added trust expectancy because it is an important factor in this digital era for e-government (Hooda et al., 2022). In Nepal, previous studies have highlighted strong significant influence of performance expectancy (Rai, 2024),

effort expectancy (Magar et al., 2023; Maharjan et al., 2025), social influence (Magar et al., 2023), and facilitating conditions (Pandey, 2024; Bajracharya, 2024; Lama et al., 2024). This study covers both Trust Expectancy and Experience with Nagarik App and provides a contemporary understanding of e-governance adoption in Kathmandu. Understanding the variables in modern times which influence the behaviour of citizens of Kathmandu regarding the usage of digital government services is crucial for research in the future, formulating policies and taking e-government use for full implementation.

#### *Performance Expectancy (PE)*

For this study, performance expectancy encompasses the perceived benefits like improved efficiency, convenience, and accessibility that citizens expect by using e-government services (Venkatesh et al., 2003). Global studies (Zeebaree & Shukur, 2022; Tremblay-Cantin, 2023) clearly indicate that when citizens perceive that e-government platforms can facilitate their tasks effectively and enhance their performance, then their chances of engaging with such services increase. Studies in Nepal also suggest that once citizens see clear benefits like saving time, reducing bureaucratic hurdles and improving service delivery, citizens are motivated to embrace e-governance (Rai, 2024; Maharjan et al., 2025) which could be applying for Police Clearance Certificate or paying traffic fines, leading to below hypothesis:

H1: Performance expectancy positively affects the behavioural intention to use e-government services.

#### *Effort Expectancy (EE)*

The level of ease while using a technological platform like user interface, simplicity, user-friendliness, is effort expectancy (Venkatesh et al., 2003). When user finds a system easy to navigate and operate, his chances of using the system increases (Zeebaree & Shukur, 2022; Tremblay-Cantin, 2023). Studies in Nepal also revealed that when people think digital services are easy to understand, use and integrate into their daily life, they are more willing to use these technologies (Rai, 2024; Maharjan et al., 2025). Residents of Kathmandu are used to seamless user interfaces of Mobile Banking, Digital Wallets, News Applications, Social Media, etc and hence expectation on user friendliness is high, hence below mentioned hypothesis is formulated:

H2: Effort expectancy positively affects the behavioural intention to use e-government services.

#### *Social Influence (SI)*

Impact on a potential user of the opinion held by peers and important personnel regarding the usage of digital services is social influence (Venkatesh et al., 2003). Global studies like the ones by (Dwivedi et al., 2022; Ilieva & Miteva, 2024; Nguyen, 2024) highlight that when citizens think that their peers or society endorse the utilization of digital government services, people will consider using them seriously. Studies in Nepal (Maharjan et al., 2025) also support these global findings and in Kathmandu where the recent Gez-Z Revolution that overthrew the government was organized via social media activism (Adhikari, 2025), social influence is vital, leading to the development of following hypothesis for this study:

H3: Social Influence positively affects the behavioural intention to use e-government services.

#### *Facilitating Conditions (FC)*

Facilitating conditions covers factors like resources, compatibility, and availability of technical support necessary for to use digital government services and platforms (Venkatesh et al., 2003).

Global studies (Almaiah & Nasereddin, 2020; Alaboodi et al., 2020; Awadhi, 2020; Zeebaree & Shukur, 2022) as well as local studies (Rai et al., 2020; Maharjan et al., 2025) have all highlighted that, when the necessary resources like technical support and internet connection are available, people are more likely to start using technologies. In Kathmandu, even with the high literacy (National Statistics Office, 2023) and connectivity (Rana, 2023), there are concerns over government infrastructure and support, leading to the following hypothesis:

H4: Facilitating Conditions positively affects the behavioural intention to use e-government services.

#### *Trust Expectancy (TE)*

Countries like Singapore, and South Korea at the top EGDI list emphasize building trust through secure infrastructure, transparent processes, and strong data protection policies (Dwivedi et al., 2022). Globally, trust has continuously influenced the behavioural intention significantly (Hooda et al., 2022; Oliveira et al., 2023; Bélanger & Carter, 2023; Dwivedi et al., 2022; Al-Shafi, 2024; Nguyen, 2024) as well in studies in Nepal have highlighted the impact of trust (Rai, 2024), and more so in the post-revolution Kathmandu where government was overthrown due to lack of trust (Adhikari, 2025), thus leading to the below mentioned hypothesis:

H5: Trust Expectancy positively affects the behavioural intention to use e-government services.

This study further examines how experience with Nagarik App may influence the relationships hypothesized above.

#### *Experience with Nagarik App (EXP)*

Experience in this study is measured via usage of the Nagarik App as it is the most widely used government application in Nepal with 62 services from 35 entities (Chaudhary, 2025). The strength of the influence of UTAUT variables on the behavioural intention of citizens to use digital government services and platforms as shown by global studies (Venkatesh et al., 2003; Bélanger & Carter, 2023; Dwivedi et al., 2022; Oliveira et al., 2023; Al-Shafi, 2024; Rai, 2024; Maharjan et al., 2025; Rodríguez-Correa, 2024; ), and with the surging digital literacy in Nepal (Paudel, 2023), the moderating role of experience is vital to be understood; forming the basis for the following hypotheses:

H1a: Experience moderates the relationship between Performance Expectancy (PE) and the behavioural intention to use e-government services (BI).

H2a: Experience moderates the relationship between Effort Expectancy (EE) and the behavioural intention to use e-government services (BI).

H3a: Experience moderates the relationship between Social Influence (SI) and the behavioural intention to use e-government services (BI).

H4a: Experience moderates the relationship between Facilitating Conditions (FC) and the behavioural intention to use e-government services (BI).

H5a: Experience moderates the relationship between Trust Expectancy (TE) and the behavioural intention to use e-government services (BI).

## **RESEARCH METHODOLOGY**

The study is conducted with descriptive research design by utilizing online questionnaire on Google Form for quantitative data. In order to capture behavioral intention of residents of

Kathmandu, the online questionnaire had 5 items each for all of the five independent variables of this study along with 5 items for the dependent variable. The items were adapted from the UTAUT Study and (Zeebaree & Shukur, 2022). Additional demographic variables, including gender, age, education and occupation, were collected alongside the moderator experience. The measurement items from prior similar research on e-governance and adoption of technology were adapted for this study (Venkatesh et al., 2003; Dwivedi et al., 2022; Oliveira et al., 2023; Al-Shafi, 2024; Maharjan et al., 2025).

A pre-test was conducted as a small survey with 40 respondents to assess reliability and clarity of the questionnaire, achieving a satisfactory reliability score (Cronbach's alpha) of 0.849 for PE, 0.927 for EE, 0.743 for SI, 0.847 for FC and 0.948 for TE. After incorporating feedback from the pre-test and consultation with the experts, the full-scale survey was conducted amongst 650 residents of Kathmandu using purposive sampling. As a survey for technology adoption, purposive sampling was best suited due to the accessibility of the respondents via social media and the digital literacy the respondents on social media have in order to respond to the questions. Data was collected exclusively via Google Forms to ensure efficiency and broad coverage of respondents across different neighborhoods. Out of the 650 responses of the survey, after removing non-residents of Kathmandu, cleaning the data, screening for completeness and consistency to minimize biases, 490 responses were taken for analysis. Out of 650 responses, 75 respondents were not residents of Kathmandu District and hence they were not included while 85 removed during data screening. Further, to meet the loading threshold for the study, during data processing one item each from constructs BI, EE, and SI as well as two items from FC were removed for analysis as their outer loading was below 0.50.

To analyze the data, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to measure direct and moderating relations accurately with SmartPLS. The breakdown of the respondents in terms of their demographic characteristics is listed in Table 1 that clearly shows diversity and representativeness.

## RESULTS

Collected sample of 490 respondents had a gender ratio of 54.9% male and 45.1% female participants which is close to the gender distribution of Kathmandu District and the age distribution of respondents represents the high young population of Kathmandu, allowing the study of differences in the behavioral intention due to digital literacy and mindset (Rana et al., 2017; Central Bureau of Statistics, 2021, Table 1). In terms of education, more than 87% of respondents had higher education or higher qualification which aligns with the total education level in Kathmandu District as the district is known for high literacy (Central Bureau of Statistics, 2021). Similarly, there is a mix of occupation of respondents private and government employees, students, businessmen, homemakers, retirees, and unemployed respondents. So, the diversity and repetitiveness of the sample population make the study generalizable on its findings for urban settings (Nepal Labor Force Survey, 2022). Finally, experience was studied in terms of the usage of the Nagarik App as it is by far the most used e-government platform in Nepal. Amongst the 490 respondents 26.73% had never used the mobile application while the remaining respondents had at least some level of experience, which is a critical driver of Behavioural Intention because it enhances users' confidence in technology (Venkatesh et al., 2016; Dwivedi et al., 2021).

**Table 1: Demography of the Respondents**

Description	Frequency	Percentage
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<i>Demographics: Gender</i>		
Male	269	54.90%
Female	221	45.10%
Others	0	0.00%
<i>Demographics: Age</i>		
Under 20 Years	78	15.92%
21 to 30 Years	113	23.06%
31 to 40 Years	101	20.61%
41 to 50 Years	109	22.24%
Above 50 Years	89	18.16%
<i>Demographics: Education</i>		
PhD Degree	3	0.61%
Master's Degree	130	26.53%
Bachelor's Degree	173	35.31%
High School (Grade 12)	120	24.49%
Secondary School (Grade 10)	37	7.55%
General Reading and Writing	27	5.51%
<i>Demographics: Occupation</i>		
Student	85	17.35%
Employed (Government)	94	19.18%
Employed (Private)	116	23.67%
Self Employed (Business)	70	14.29%
Homemaker	40	8.16%
Retired	29	5.92%
Unemployed	56	11.43%
<i>Experience with Nagarik App</i>		
Never	131	26.73%
Less than 1 Year	51	10.41%
1 - 2 Years	80	16.33%
More than 2 Years	228	46.53%

*Source:* Created from primary data by the author

#### **Measurement Model Assessment**

The assessment of the measurement model showed all the six constructs (5 independent variables and 1 dependent variable) demonstrated strong internal consistency as seen below in Table 2. Amongst the constructs studied, Cronbach's alpha ( $\alpha$ ) values for them were between 0.760 and 0.943. Furthermore, in terms of the composite reliability of the constructs (pc) were found to be between 0.838 and 0.961. Likewise, in regards to the average variance extracted (AVE) the figures were between 0.573 and 0.892, surpassing recommended thresholds for all three parameters (Hair et al., 2021; Sarstedt et al., 2023). FC (AVE = 0.892) and EE (AVE = 0.856) exhibited particularly high convergence, suggesting that their indicators strongly represent the latent constructs. Social Influence showed moderate convergence with the AVE of 0.573 which reflects the multifaceted social influence (Hofstede, 2011; Rana et al., 2024) in the context of Kathmandu as people from all over the country live in Kathmandu. Overall, measurement model confirms the validity as well as the reliability of the variables being studied, thus paving way for the structural model evaluation.

**Table 2: Overview of Reliability and Validity of Constructs**

Construct	Cronbach's Alpha ( $\alpha$ )	Composite Reliability ( $\rho_c$ )	$\rho_a$	AVE
PE	0.927	0.945	0.927	0.773
EE	0.943	0.959	0.946	0.856
SI	0.760	0.838	0.831	0.573
FC	0.939	0.961	0.942	0.892
TE	0.940	0.954	0.948	0.806
BI	0.931	0.951	0.931	0.829

*Source:* Created from primary data by the author

Evaluation of the discriminant validity done using the Heterotrait-Monotrait (HTMT) ratio, a recommended method in PLS-SEM (Henseler et al., 2015; Sarstedt et al., 2023) all the HTMT values below the 0.90 threshold as listed in Table 3 confirming that the constructs are distinct.

**Table 3: HTMT Matrix**

Constructs	BI	EE	FC	PE	TE
EE	0.865	-	-	-	-
FC	0.865	0.898	-	-	-
PE	0.872	0.873	0.813	-	-
SI	0.329	0.202	0.215	0.333	0.443
TE	0.769	0.651	0.656	0.783	-

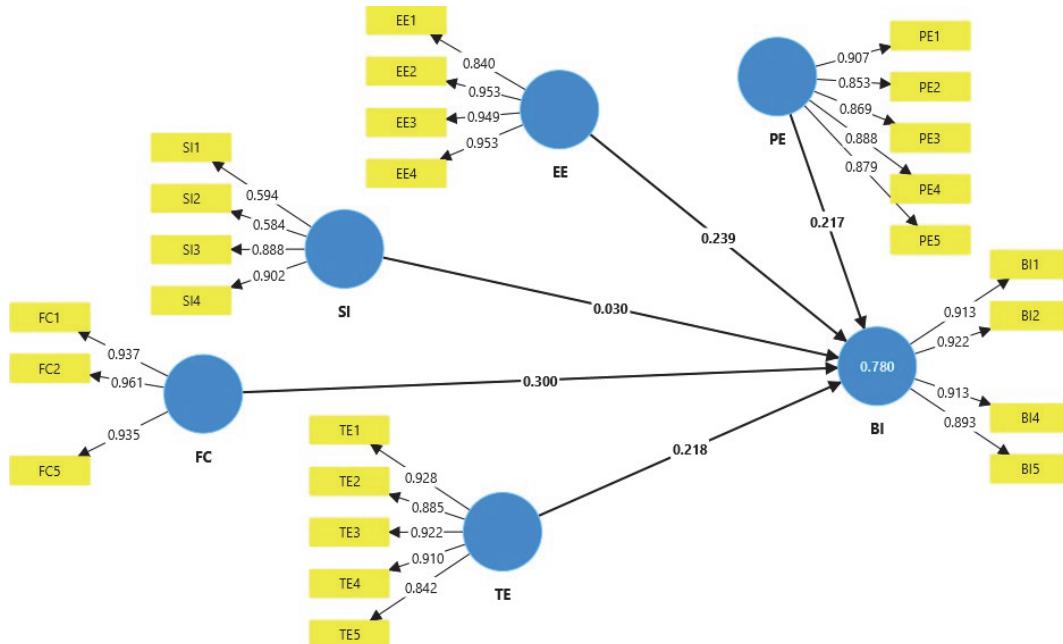
*Source:* Created from primary data by the author

Amongst the HTMT values, the highest was between EE and FC at 0.898 which shows theoretical link between ease of use and availability of technical support whereas moderate HTMT values of 0.872 between BI and PE as well as 0.865 between BI and EE were recorded which align with the main theoretical framework for this study, the UTAUT framework (Venkatesh et al., 2016; Al-Hujran et al., 2018). Other HTMT values were well below 0.85 which clearly shows that SI and TE are conceptually independent from BI, EE, FC, and PE (Table 3).

### Structural Model Assessment

All the relationships that were established in the hypothesis were tested with structural model. Bootstrapping was done with 5,000 subsamples to calculate the path coefficients ( $\beta$ ), along with the t-statistics and p-values (Hair et al., 2021). The findings from the model showed 81% of variance in citizens' behavioural intention ( $R^2 = 0.810$ ) which clearly indicates a strong predictive power. Facilitating Conditions (FC) was the construct with strongest influence on the Behavioural Intention for using digital governance with data of:  $\beta = 0.265$ ,  $t = 5.445$  and  $p < .001$  indicating that the role of technical infrastructure, support mechanism, and accessibility of resources is the most important one in Kathmandu and this finding has been recorded in other studies in developing nations as well (Al-Awadhi & Morris, 2008; Al-Hujran et al., 2018). The second significant positive predictor was Effort Expectancy ( $\beta = 0.247$ ,  $t = 4.372$ ,  $p < .001$ ) and

it strengthens the fact that technology being easy to use with user-friendly interface is important for citizens to make use of digital platforms and services by the government (Venkatesh et al., 2016; Dwivedi et al., 2019). Thirdly, Trust Expectancy (TE) also had a positive significant impact on the behavioural intention with data of  $\beta = 0.171$ ,  $t = 2.147$  and  $p = .032$  which highlights the importance of reliability and security to develop the behavioural intention by building trust of people on technology (Carter & Bélanger, 2005; Bwalya, 2018, Figure 1).



*Source: Created from primary data by the author*

**Figure 1: PLS SEM Model**

On the other hand, performance expectancy, a historically established influencer, did not have statistically significant impact on the intention of people to use e-governance which highlights the fact the people of Kathmandu are well versed with technology and its benefits (Alalwan et al., 2022) which is further justified by the fact that almost three out of four people surveyed having some level of experience. This highlights the fact that in this mature digital era, adoption relies more on other factors as people have understood the benefits of e-governance (Williams et al., 2023; Almarzooqi & AlMarzooqi, 2024). Furthermore, the social influence was only marginally significant meaning their adoption decisions are not influenced by the society (Venkatesh et al., 2003; Khanal & Thapa, 2023).

The moderation analysis highlighted a significant effect of Experience with Nagarik App (EXP), especially with Trust Expectancy ( $EXP \times TE \rightarrow BI$ ) with findings of  $\beta = -0.116$ ,  $t = 5.048$  and  $p < .001$  and also with the Performance Expectancy ( $EXP \times PE \rightarrow BI$ ) with figures of  $\beta = -0.104$ ,  $t = 2.485$  and  $p = 0.013$  (Table 4). The findings confirm that the impact of trust and expectations on performance decreases with the experience of Nagarik App as users with experience give

more priority to the functionality and usability of the system instead of trust or benefits (Gefen et al., 2003). Conversely, experience had non-significant moderating effect for societal influence (SI), external factors like infrastructure and support (FC) and people perception on the effort required (EE) to use government digital technologies.

**Table 4: Total Effects and Significance Testing**

Path	$\beta$	t-value	p-value	Significance	Decision
EE → BI	0.247	4.372	0.000	Significant	Supported
FC → BI	0.265	5.445	0.000	Significant	Supported
PE → BI	0.076	1.584	0.113	Not Significant	Rejected
SI → BI	0.046	2.147	0.032	Significant	Supported
TE → BI	0.171	2.147	0.032	Significant	Supported
EXP×TE → BI	-0.116	5.048	0.000	Significant	Supported
EXP×PE → BI	-0.104	2.485	0.013	Significant	Supported

*Source: Created from primary data by the author*

## DISCUSSION

Amongst the constructs of the study, infrastructural and technological support was the strongest predictor recognized by the citizens of Kathmandu for their behavioural intention which aligns with the circumstances in Kathmandu where the role of reliable technical infrastructure, internet access, and user support mechanisms from government are important, aligning with the studies in Nepal and the developing world (Sharma et al., 2022; Bashir et al., 2023). The recent allocation of NPR 7.4 billion budget in Nepal specifically to develop digital infrastructures and supporting ecosystems for the fiscal year 2025/26 (Chapagain & Whale, 2025), is a right step as confirmed by the study. Secondly, Effort Expectancy also had significant impact as technology with user-friendly interfaces and easy navigation speeds up technology adoption (Dwivedi et al., 2020) and helps retain users as well. Furthermore, the third most influential construct was Trust Expectancy and it clearly indicates that the trust of users on the reliability and security of systems is necessary for adoption intentions similar to many other studies (Carter & Bélanger, 2005; Rana et al., 2023). In a developing country like Nepal with historically low level of trust in the government and recent overthrowing of the government, making people feel safe and secure about their sensitive data is extremely important. Furthermore, past empirical studies in Kathmandu District have also covered the importance of trust as well as the ease of use in developing the behavioural intentions (Basnet et al., 2022; Gautam & Adhikari, 2023).

On the other hand, a historically established major predictor (performance expectancy) in both global and local context had no significant impact, reflecting the fact that people of Kathmandu are familiar with digital services (Alalwan et al., 2022) also supported by the fact that almost 75% of the respondents had some level of experience with the Nagarik App. The non-significant influence of Performance Expectancy on the behavioral intention to use e-governance platforms in current mature digital world suggests that in contexts with high digital maturity, user adoption has surpassed the effectiveness stage (Williams et al., 2023; Almarzooqi & AlMarzooqi, 2024). Further, influence of the society was only marginally significant suggesting that people make

such decisions based on their own experience and perception rather than pressure from other (Venkatesh et al., 2003; Khanal & Thapa, 2023).

Furthermore, as the relationships between Behavioural Intention and Trust Expectancy as well as Performance Expectancy saw negative moderating effect of experience, it indicates people do not find importance in trust and performance of system as they gain experience. So, digital literacy and familiarity reshape user decision-making processes in e-government contexts (Gefen et al., 2003; Rana et al., 2023; Kumar et al., 2024). On the other hand, the moderating effects of experience with Nagarik App were not significant on the constructs Social Influence, Facilitating Conditions. Similar findings can be seen in other developing nations as well where infrastructure outweigh the role of external social drivers (Shareef et al., 2022; Al-hujran et al., 2023). Nepal Telecommunications Authority (2024) reported that limitations in the infrastructure and low digital literacy are the key barriers to e-government adoption in Nepal. And as this study also highlights the fact that Nagarik App has in-fact played a very vital role in exposing the general public to e-government services, the application can help accelerate e-governance usage.

### ***Theoretical and Practical Implications***

This study in Kathmandu highlights the significance of three factors: infrastructure support, ease of use, and having trust in the government systems (Li et al., 2021; Sihotang et al., 2023), it supports the UTAUT theoretically while also contributing to the growing literature of UTAUT extension with trust in this digital era. The study further highlights how experience with Nagarik App has reshaped the perception of people on technology adoption. In practical terms, regarding the most impactful driver, facilitating conditions, the government needs to ensure stable and secure internet connectivity by investing in the development of infrastructure while also focus on providing support services during and after onboarding. For the second driver, effort expectancy, it is important for platforms like Nagarik App and other e-government services portal, both mobile and computer based to have easy navigation and provide users with seamless user interface. The registration process and general usage should be swift and hassle-free.

Further, the study highlights the role of trust and how vital it is to shape behavioural intention of people. E-government services need sensitive data of residents like mobile number, email, date of birth, passport number, citizenship number and even family tree at times. For a resident to provide and seek such data digitally, they must have trust in the system that their data will not be hacked or breached and that there are enough security measures to safeguard their data. Capacity building initiatives amongst less experienced and non-users can help build trust (Bashir et al., 2023; Kumar et al., 2024) and onboard residents at the same time, thus accelerating adoption. Further, the perception and priority of people on infrastructure, the level of ease and comfort associated with technology and trust need to be understood along with the role Nagarik App has played to give experience to people and thereby reducing their trust related doubts. All these combined, policies should be formulated and actions to strengthen infrastructure and support, enhance the user interface for seamless navigation and launch campaigns to build trust on residents of Kathmandu to use e-government services.

### **CONCLUSION**

In short, the contemporary role of infrastructure and support in terms of facilitating conditions, user interface and smooth navigation for effort expectancy and data security to develop trust expectancy, have been identified as major influencers to the behavioural intention of citizens of Kathmandu, matching with global studies like (Li et al., 2021; Sihotang et al., 2023). Further, the study highlights how experience with the Nagarik App helps build trust and increase the

performance expectancy as well. So, to increase e-participation priorities have to be set on these aspects of technology adoption.

## LIMITATIONS AND FUTURE SCOPE

The study has some limitations that suggest directions for future research. Being a quantitative study, the study does not cover deeper motivations in people, lacking qualitative depth, and being a self-reported online survey, there could have been social desirability biases as well as self-reported bias. Further, the geographical focus on Kathmandu, and exclusion of rural population, limits its generalization to the whole country Nepal because of the digital divide despite the rise in connectivity even in remote areas. Similarly, being a cross-sectional study, the study has not identified the change in behavioural intention with increasing level of experience. Likewise, the study has over-representation of educated respondents, which reflects the population of Kathmandu but does not reflect rural areas with lower literacy rates.

In future, to get better understanding and depth regarding the true motivation of people and drivers to technology adoption, studies could leverage mixed-method approaches and combine surveys with interviews or focus groups, also helping reduce self-reported bias. Also, expanding study area to multiple regions, covering both the urban and village areas would help generalize to the entire nation as it would include less educated and less digitally literate groups as well. Furthermore, the number of users of Nagarik App is growing by the day and there is a direct impact on the experience level of users, thus having an impact on the UTAUT constructs, trust and moderators. So, longitudinal studies with increasing experience level could reveal numerous ways to accelerate the efforts of the government of Nepal to onboard residents on governmental digital platforms and retain the ones who already use e-governance.

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## SURVEY QUESTIONNAIRE ITEM SUMMARY

CONSTRUCT	ITEMS
Performance Expectancy (PE)	PE1: I would find e-government services useful to get government services.
	PE2: Using e-government services enables me to get Government services more quickly.
	PE3: Using e-government services increases my productivity.
	PE4: If I use e-government services, I will increase my ability to get services.

	PE5: Using e-government services will help me complete my obligations towards Government in time.
Effort Expectancy (TE)	EE1: My interaction with e-government services would be clear and understandable.
	EE2: It is easy for me to become skillful in using e-government services.
	EE3: I would find e-government services easy to use.
	EE4: Learning to operate e-government services is easy for me.
Social Influence (SI)	SI1: People who influence my behaviour think that I should use e-government services.
	SI2: People who are important to me think that I should use the e-government services.
	SI3: The elected personnel in the Government encourage people to use e-government services.
	SI4: In general, the Government has supported the use of e-government services.
Facilitating Conditions (FC)	FC1: I have the resources that are necessary to use e-government services.
	FC2: I have the knowledge that is necessary to use e-government services.
	FC5: I have enough internet experience to use e-government services.
Trust Expectancy (TE)	TE1: I trust using software for e-government services.
	TE2: I trust the security mechanisms of e-government services.
	TE3: I trust e-government services.
	TE4: I trust the information provided to me via e-government services.
	TE5: I trust my government to have access to my personal information.
Behavioural Intention to Use e-government Services (BI)	BI1: I plan to start / continue using e-government systems.
	BI2: I like / would like to get government services digitally.
	BI4: If available, I would use e-government systems for every service I seek from the government.
	BI5: I plan to recommend my colleagues to use e-government services.

