Examining the Factors Influencing the Use of E-Forms in Government Services in Itahari Sub-Metropolitan City

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Abstract

Article History

Submitted:

15 May 2025

Reviewed:

10 July 2025

Accepted:

25 July 2025

DOI:

https://doi.org/10.3126/ jovac.v2i1.83884

QR Code:



Publisher

Research and
Innovation Committee
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This study explores the reasons why many citizens in Itahari Sub-Metropolitan City, Nepal, do not use e-forms independently for government services. It applies the Unified Theory of Acceptance and Use of Technology (UTAUT) to examine the effects of Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), Effort Expectancy (EEX), and gender differences. Data were collected from 122 citizens using mailed questionnaires and analyzed using SPSS. Results show SIN as the most significant predictor of e-form usage of habits $(\beta = 0.277, p = 0.090)$, with females reporting higher social influence (p = 0.030). The regression model explained only 7.8% of the variance ($R^2 = 0.078$), indicating the influence of additional factors such as digital literacy. Findings highlight the importance of awareness campaigns, enhanced ICT infrastructure, simplified e-form platforms, and digital literacy initiatives to reduce reliance on third-party services.

Keywords: E-governance, e-form adoption, digital literacy, ICT infrastructure, citizen-centric services, Nepal

Introduction

To increase effectiveness, openness, and accessibility, e-governance incorporates information and communication technology (ICT) into the provision of public services (Heeks, 2006). Digital governance is being used more and more in Nepal for services like driver's license processing, passport applications, and citizenship registration. The introduction of online e-forms was intended to simplify administrative tasks and reduce physical visits to government offices (AlAwadhi & Morris, 2009). In cities like Itahari, a sizable section of the population still depends on outside agents to perform these tasks in spite of these technical developments. This dependence not only raises user costs but also undermines the primary objective of empowering citizens through digital platforms (Bhul, 2023). Social influence, perceived ease of use, and trust in digital systems are some of the elements that frequently impact the adoption of e-government services (Carter & Bélanger, 2005). According to Venkatesh et al. (2003), the Unified Theory of Acceptance and Use of Technology (UTAUT) offers a strong foundation for comprehending these behavioral goals. In addition, the Technology Acceptance Model (TAM) provides information about how perceived utility and usability affect adoption choices (Davis, 1989).

This study aims to explore the behavioral and demographic factors influencing the use of autonomous e-forms in Itahari Sub-Metropolitan City. It examines gender-based variations in user behavior and focuses on four main variables: Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), and Effort Expectancy (EEX) (Munyoka, 2023). The purpose is to identify critical impediments to e-form usage and propose actionable methods for raising acceptance rates, thereby contributing to Nepal's Digital Nepal Framework (Sharma, 2020).

Problem Statement

The use of e-forms has improved government services, allowing for faster and more accessible processes for tasks such as citizenship applications, passport submissions, and driving license requests (Kharel, 2012). Despite increased access to technology and higher education levels, over 60% of Itahari residents use third-party services to complete e-forms, incurring additional fees (Bhul, 2023). Around 60% of users continue to depend on third-party services, which adds an extra financial burden

(Kharel, 2012). The efficiency and potential cost savings of e-governance are undermined by this ongoing dependence, which highlights significant obstacles to independent e-form usage (Heeks, 2006).

This study addresses the critical requirement to understand the behavioral factors that influence people's habit of using e-forms independently. It specifically examines the roles of Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), Effort Expectancy (EEX), and demographic factors such as gender in shaping e-form adoption (Venkatesh et al., 2016). The rationale behind identifying these barriers is to improve e-readiness, minimize dependency on costly third-party services, and promote citizen-centric e-governance (Bannister & Connolly, 2014). By investigating these aspects, the study hopes to provide policymakers with practical insights for designing targeted interventions, such as increased digital literacy programs, improved ICT infrastructure, and public awareness campaigns, to encourage wider adoption of e-governance services in Itahari.

Objectives of the Study

- To quantify the influence of Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), and Effort Expectancy (EEX) on the habit of independently using e-forms for government services in Itahari Sub-Metropolitan City.
- To examine gender differences in the influence of SIN, FCO, TRU, and EEX on the habit of e-form adoption among citizens in Itahari.

Literature Review

This literature review synthesizes theoretical and empirical studies to provide a foundation for examining the factors influencing the habit of independently using e-forms in government services in Itahari Sub-Metropolitan City, Nepal. The review is organized into two subsections: a Theoretical Review focusing on the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM), and an Empirical Review of quantitative studies on e-governance adoption, particularly in developing countries. These frameworks and studies inform the analysis of Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government

(TRU), Effort Expectancy (EEX), and gender as predictors of e-form usage, aligning with the study's quantitative methodology and SPSS analysis.

Theoretical Review

The adoption of e-forms in government services can be explained using known technology acceptance theories, notably UTAUT and TAM, which give systematic frameworks for examining behavioral aspects that influence technology use.

Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkatesh et al. (2003) developed UTAUT, which incorporates different technology acceptance models to explain user intentions and actions towards information systems. It assumes four main constructs influence behavioral intention (BI) and use behavior (UB): performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC). In this study, SI (Social Influence, SIN), FC (Facilitating Conditions, FCO), and EE (Effort Expectancy, EEX) are studied, with Trust in E-Government (TRU) introduced as a context-specific construct due to its importance in e-governance. The dependent measure, habit of e-form using (HAB), represents automatic behavior, which is congruent with UTAUT's emphasis on prolonged use (Venkatesh et al., 2012).

The UTAUT model can be expressed as:

$$\begin{split} BI &= \beta_0 + \beta_1 PE + \beta_2 EE + \beta_3 SI + \beta_4 FC + \epsilon \ (1) \\ UB &= \beta_0 + \beta_1 BI + \beta_2 FC + \epsilon \ (2) \end{split}$$

where β_0 is the intercept, β_1 – β_4 are regression coefficients, and ϵ is the error term. In this study, UB is operationalized as HAB, and SI, FC, EE, and TRU are tested as predictors, with gender as a moderator. UTAUT is highly relevant to Itahari's collectivist culture, where social influence and infrastructure significantly shape technology adoption (Venkatesh et al., 2016; Dwivedi et al., 2017).

Technology Acceptance Model (TAM)

Davis (1989) proposed TAM, which emphasizes two constructs, namely perceived usefulness (PU), the extent to which a technology is thought to improve performance, and perceived ease of use (PEOU) of the technology. These influence attitude (A), behavioral intention (BI), and actual use (AU). In this study, PEOU aligns

with Effort Expectancy (EEX), while PU relates to the perceived benefits of e-forms (Wixom & Todd, 2005).

The TAM model can be expressed as:

$$BI = \beta_0 + \beta_1 PU + \beta_2 PEOU + \varepsilon (3)$$

$$AU = \beta_0 + \beta_1 BI + \epsilon (4)$$

where β_0 is the intercept, β_1 and β_2 are regression coefficients, and ϵ is the error term. TAM is relevant for examining e-form adoption in Itahari, where user-friendly interfaces and perceived benefits are critical for overcoming barriers like low digital literacy (AlAwadhi & Morris, 2009; Shareef et al., 2011).

UTAUT and TAM complement each other: UTAUT captures social and contextual factors (SIN, FCO), while TAM emphasizes individual perceptions (EEX, benefits). Trust (TRU) is integrated to address data security concerns in Nepal's e-governance context (Bhandari, 2023; Al-Adawi et al., 2005).

Empirical Review

Quantitative studies on e-governance adoption provide evidence relevant to this study's focus on SIN, FCO, TRU, EEX, and gender, particularly in developing countries. These studies used regression, correlation, and t-tests to quantify predictor effects on e-form usage. Venkatesh et al. (2016) has done a quantitative study in India that used UTAUT to assess e-governance adoption. The regression analysis demonstrates that Social Influence (β = 0.34, p < 0.01) and Facilitating Conditions (β = 0.29, p < 0.05) strongly predict behavioral intention (R^2 = 0.42). This study found that SIN (β = 0.277, p = 0.090) is the most influential predictor, but the lesser R^2 (0.078) shows other elements in Itahari, such as digital literacy, may be relevant (Bhul, 2023).

AlAwadhi and Morris (2009) employed TAM in a survey-based study in Kuwait and found that Perceived Ease of Use (β = 0.31, p < 0.01) and Perceived Usefulness (β = 0.36, p < 0.01) strongly predicted e-government adoption, with a R² of 0.39. Their correlation analysis showed a moderate relationship between PEOU and usage (r = 0.28, p < 0.05), similar to this study's weak correlation for EEX (r = 0.320, p = 0.015). This suggests that complex e-form interfaces may low adoption in Itahari (Sá et al., 2016).

Carter and Belanger (2005) conducted a quantitative study to assess trust in e-government in the United States. The regression analysis showed that trust

 $(\beta = 0.45, p < 0.001)$ significantly predicted the desire to utilize e-services, with a correlation of r = 0.50 (p < 0.001). The inclusion of TRU in this study is supported; however, the small effect ($\beta = -0.133, p = 0.429$) may represent Nepal-specific trust challenges, such as data privacy concerns (Bhandari, 2023; Warkentin et al., 2002).

Bhandari (2023) conducted a study in Nepal on e-governance barriers and found that unstable internet had a marginal importance (β = 0.21, p = 0.07), which is similar to this study's weak FCO effect (β = 0.103, p = 0.487). Their correlation analysis showed a weak association between Effort Expectancy and Usage (r = 0.24, p = 0.05), which is consistent with this study's findings (r = 0.320, p = 0.015).

Munyoka (2023) investigated gender differences in e-government adoption in Zimbabwe using t-tests and discovered that females reported stronger Social Influence (p = 0.025) than males, which is consistent with our study's finding (p = 0.030 for SIN). The regression model showed that Social Influence (β = 0.30, p < 0.05) was a significant predictor, supporting the study's focus on SIN (Salloum et al., 2020).

Other studies emphasize the importance of digital literacy and infrastructure. Rana et al. (2015) discovered that inadequate digital literacy in impoverished nations significantly hinders e-government adoption (β = 0.27, p < 0.05), indicating a fundamental hurdle in Itahari. Okunogbe and Pouliquen (2022) discovered that solid infrastructure increases adoption of electronic tax filing systems, having a significant influence on usage (β = 0.32, p < 0.01). These findings highlight the necessity for addressing digital literacy and ICT infrastructure in Nepal. These studies show how important SIN, FCO, TRU, and EEX are in understanding technology adoption, especially with gender differences in Nepal's specific context.

This study addresses these by testing UTAUT and TAM constructs in Itahari, using quantitative methods to quantify their influence and explore gender differences, consistent with the significant SIN finding and gender disparity in SIN (Dwivedi et al., 2017; Zhang & Zhu, 2021).

Research Methodology

This study used a quantitative research design to investigate the behavioral factors influencing the habit of independently using e-forms for government services in Itahari Sub-Metropolitan City, Nepal. The dependent variable, Habit (HAB), represents

the automaticity of e-form usage. The independent variables include Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), and Effort Expectancy (EEX), derived from the Unified Theory of Acceptance and Use of Technology (UTAUT; Venkatesh et al., 2003). The methodology aligns with the study's objectives to quantify the influence of these factors and examine gender differences, using statistical analyses conducted in SPSS.6565

Population and Sampling

The population consists of Itahari Sub-Metropolitan City residents who have applied for government services (such as citizenship, passport, or driver's license) using e-forms. A non-probability convenience selection method was used to pick 122 respondents, assuring equal gender representation (47.54% male, n = 58; 52.46% female, n = 64) and diverse levels of digital literacy and education. Digital literacy was measured using a questionnaire item that measured respondent's familiarity and comfort with digital platforms (e.g., internet, mobile apps), with 85% indicating at least basic digital literacy skills (Rana et al., 2015). Education levels included about 79% of the people studied had finished higher secondary education (like +2), 14% had earned a bachelor's degree, and 7% had gone on to get postgraduate or PhD qualifications. The study used convenience sampling because of limited resources and its exploratory approach, though this method makes it harder to apply the findings to a broader population (Bhandari, 2023). This approach ensured a diverse range of participants but may have leaned toward those who were easier to reach or more comfortable with technology I.e. tech-savvy individuals.

Data Collection

Primary data were gathered using mailed questionnaires based from validated UTAUT measures (Venkatesh et al., 2003). The questionnaire included 20 items evaluating HAB (4 items), SIN (4 items), FCO (5 items), TRU (4 items), and EEX (3 items) on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Example items included: "People important to me think I should use e-forms" (SIN) and "Using e-forms is easy for me" (EEX). A pilot test with 10 respondents ensured clarity and reliability, yielding Cronbach's alpha values above 0.7 for all constructs, indicating acceptable internal consistency (Nunnally, 1978). Questionnaires were distributed via

mail to ensure accessibility, with a response rate of 80% (n = 122 out of 152 distributed).

Data Analysis

To meet the study's objectives, data from 122 respondents were analyzed with IBM SPSS Statistics. The analysis used a structured technique, as described below, to quantify relationships and test gender differences, which is compatible with quantitative methodologies in e-governance research (Bhandari, 2023).

Descriptive statistics. For HAB, SIN, FCO, TRU, and EEX, I summarized respondent demographics (e.g., gender, education) and variable characteristics (means, standard deviations). This provided a baseline for evaluating e-form usage trends, demonstrating moderate HAB levels (mean = 2.71) and greater SIN among females (mean = 6.40 vs. 5.52 for men).

Correlation Analysis. I Examined relationships between SIN, FCO, TRU, EEX, and HAB using Pearson's correlation coefficient. Significant correlations (e.g., r = 0.487, p < 0.001 for SIN and TRU) indicated interrelationships among predictors, though weak correlations with HAB suggested limited direct impact. Regression Analysis. I Assessed the predictive power of SIN, FCO, TRU, and EEX on HAB using multiple linear regression. The model ($R^2 = 0.078$, P = 0.390) showed SIN as the strongest predictor (P = 0.277, P = 0.090), highlighting its role in e-form adoption.

Independent Sample T-Test. I Compared males and females on HAB, SIN, FCO, TRU, and EEX to identify gender differences. A significant difference was found for SIN (p = 0.030), with females reporting higher social influence, supporting the study's gender-focused objective (Munyoka, 2023).

Ethical Considerations

Ethical protocols were followed to ensure respondent protection. Each person signed a consent form included with the questionnaire, which explained the study's goal and voluntary participation. Data were used solely for research purposes, with no personally identifiable information collected, adhering to ethical standards in social research (Bhandari, 2023; Saunders et al., 2016).

Data Presentation and Analysis

This section presents findings from a survey of 122 citizens in Itahari Sub-Metropolitan City, Nepal, examining factors influencing the habit of independently using e-forms for government services. The dependent variable, Habit (HAB), represents automaticity in e-form usage, with Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), and Effort Expectancy (EEX) as independent variables. Data were analyzed using IBM SPSS Statistics through descriptive statistics, reliability analysis, correlation analysis, regression analysis, and independent sample t-tests, consistent with quantitative e-governance research (Bhandari, 2023).

Reliability Statistics

Reliability was assessed using Cronbach's alpha to ensure internal consistency of the measurement scales. The overall Cronbach's alpha for all 20 items (4 for SIN, 5 for FCO, 4 for TRU, 3 for EEX, 4 for HAB) was 0.85, exceeding the acceptable threshold of 0.7 and indicating reliable measures (Nunnally, 1978; Bhandari, 2023). Table 1 presents the reliability statistics for the combined scale.

 Table 1

 Reliability Statistics

Scale	Cronbach's Alpha	Number of Items
All Constructs	0.85	20

Note: Data analyzed using SPSS, 2024.

Scale Summary

The constructs were measured using validated scales adapted from Venkatesh et al. (2003), employing a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The independent variables were SIN (4 items, e.g., "People important to me think I should use e-forms"), FCO (5 items, e.g., "I have the resources needed to use e-forms"), TRU (4 items, e.g., "I trust e-government systems to protect my data"), and EEX (3 items, e.g., "Using e-forms is easy for me"). The dependent variable, HAB (4 items, e.g., "Using e-forms has become a habit for me"), was placed last to reflect its

role. Table 2 summarizes the overall mean, standard deviation, and Cronbach's alpha for each construct, calculated across all respondents.

Table 2Scale Summary

Construct	Mean	Std. Deviation	Cronbach's Alpha
SIN	5.98	1.49	0.80
FCO	10.20	2.28	0.82
TRU	6.89	1.50	0.76
EEX	6.60	1.40	0.75
HAB	2.66	1.07	0.78

Note: Means and standard deviations are averaged across genders from gender-specific data (N = 57 for SIN, 56 for FCO, 56 for TRU, 57 for EEX, 61 for HAB). Data analyzed using SPSS, 2024.

Demographic Profile

The sample included 122 respondents, with 58 males (47.54%) and 64 females (52.46%), ensuring balanced gender representation for analyzing differences in e-form adoption (see Table 3). This supports the study's objective to examine gender effects (Venkatesh et al., 2003).

Table 3 *Gender-Wise Classification of Respondents*

Gender	No. of Respondents	Percentage
Male	58	47.54%
Female	64	52.46%
Total	122	100%

Note: Data analyzed using SPSS, 2024.

Descriptive Statistics

Descriptive statistics for SIN, FCO, TRU, EEX, and HAB, split by gender, are presented in Table 4. The overall mean for HAB (2.66) indicates moderate automaticity

in e-form usage, suggesting limited widespread adoption in Itahari. Females reported a higher mean for SIN (6.40) compared to males (5.52), indicating stronger social influence among females (Munyoka, 2023).

Table 4Descriptive Statistics

Variable	Gender	N	Mean	Std. Deviation	Std. Error Mean
SIN	Male	27	5.52	1.695	0.326
	Female	30	6.40	1.276	0.233
FCO	Male	27	10.30	2.554	0.492
	Female	29	10.10	2.024	0.376
TRU	Male	26	6.88	1.728	0.339
	Female	30	6.90	1.296	0.237
EEX	Male	27	6.70	1.564	0.301
	Female	30	6.50	1.253	0.229
HAB	Male	29	2.69	1.168	0.217
	Female	32	2.63	0.976	0.172

Note: Data analyzed using SPSS, 2024.

Correlation Analysis

Correlation analysis (Table 5) examined relationships among SIN, FCO, TRU, EEX, and HAB using Pearson's correlation coefficient. Significant positive correlations were found between SIN and TRU (r = 0.487, p < 0.001), SIN and FCO (r = 0.361, p = 0.006), and TRU and EEX (r = 0.433, p = 0.001), suggesting interrelationships among predictors that support e-form adoption (Venkatesh et al., 2003; Dwivedi et al., 2017). Correlations with HAB were weak and insignificant (e.g., SIN and HAB: r = 0.245, p = 0.067), indicating limited direct impact on habit formation.

Table 5Correlation Analysis

Variables	SIN	FCO	TRU	EEX	HAB
SIN	0.80	0.361**	0.487**	0.320*	0.245
		(0.006)	(0.000)	(0.015)	(0.067)
	57	56	56	57	57
FCO	0.361**	0.82	0.290*	0.257	0.182
	(0.006)		(0.031)	(0.056)	(0.179)
	56	56	55	56	56
TRU	0.487**	0.290*	0.76	0.433**	0.157
	(0.000)	(0.031)		(0.001)	(0.247)
	56	55	56	56	56
EEX	0.320*	0.257	0.433**	0.75	0.203
	(0.015)	(0.056)	(0.001)		(0.134)
	57	56	56	57	57
HAB	0.245	0.182	0.157	0.203	0.78
	(0.067)	(0.179)	(0.247)	(0.134)	
	57	56	56	57	61

Note: Diagonal values represent Cronbach's alpha for each construct.

Regression Analysis

Multiple linear regression assessed the predictive power of SIN, FCO, TRU, and EEX on HAB (Table 6). The model summary showed a low R^2 of 0.078, indicating that only 7.8% of the variance in HAB is explained by the predictors, suggesting other factors (e.g., digital literacy) may be influential (Bhandari, 2023; Rana et al., 2015). The Durbin-Watson statistic (2.259) indicates no significant autocorrelation in residuals. The overall model was not statistically significant (F = 1.052, p = 0.390), but SIN had the

^{**}p < 0.01, *p < 0.05. Data analyzed using SPSS, 2024.

highest beta coefficient (β = 0.277, p = 0.090), suggesting it is the most influential predictor of HAB.

Table 6Regression Analysis

Model	R	R ²	Adjusted R ²	Std. Error of Estimate	Durbin-Watson
1	0.279	0.078	0.004	1.064	2.259

ANOVA

Model	Sum of Squares	df	Mean Square	F	p
Regression	4.763	4	1.191	1.052	0.390
Residual	56.583	50	1.132		
Total	61.345	54			

Coefficients

Model	В	Std. Error	β	t	p
Constant	1.853	0.932		1.989	0.052
SIN	0.195	0.113	0.277	1.730	0.090
FCO	0.048	0.069	0.103	0.700	0.487
TRU	-0.094	0.118	-0.133	-0.797	0.429
EEX	-0.025	0.115	-0.034	-0.220	0.827

Note: Dependent Variable: HAB. Data analyzed using SPSS, 2024.

T-Test Analysis

An independent sample t-test (Table 7) compared males and females on SIN, FCO, TRU, EEX, and HAB. No significant gender differences were found for HAB (p = 0.815), FCO (p = 0.755), TRU (p = 0.970), or EEX (p = 0.588). However, females reported significantly higher SIN (p = 0.030, mean difference = -0.881), indicating greater social influence in e-form adoption among females (Munyoka, 2023).

Table 7 *T-Test for Gender Differences*

Variable	Levene's Test	t	df	Sig.	Mean	Std. Error
		•		(2-tailed)	Difference	Difference
SIN	F = 1.861,	-2.232	55	0.030	-0.881	0.395
	p = 0.178				0.000	0.375
FCO	F = 4.284,	0.314	54	0.755	0.193	0.614
100	p = 0.043	0.51				
TRU	F = 1.913,	-0.038	54	0.970	-0.015	0.405
1110	p = 0.172					
EEX	F = 1.308,	0.545	55	0.588	0.204	0.374
	p = 0.258					
HAB	F = 2.079,	0.235	59	0.815	0.065	0.275
11111	p = 0.155					

Note: Data analyzed using SPSS, 2024.

Results and Discussion

Results

The study analyzed data from 122 respondents in Itahari Sub-Metropolitan City, Nepal, to examine the factors influencing the habit of independently using e-forms (HAB), with Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), and Effort Expectancy (EEX) as predictors. Descriptive statistics, reliability analysis, correlation analysis, regression analysis, and independent sample t-tests were conducted using IBM SPSS Statistics, with variations in sample sizes (N = 55–57) due to incomplete responses for some items.

Descriptive Statistics and Scale Summary

Table 2 shows the mean scores for the constructs, indicating moderate automaticity in e-form usage (HAB: M = 2.66, SD = 1.07). SIN had a mean of 5.98 (SD = 1.49), FCO 10.20 (SD = 2.28), TRU 6.89 (SD = 1.50), and EEX 6.60 (SD = 1.40). Females reported higher SIN (M = 6.40) than males (M = 5.52), suggesting stronger

social influence among females (Table 4). Cronbach's alpha values ranged from 0.75 (EEX) to 0.82 (FCO), confirming reliable scales (Table 2; Nunnally, 1978).

Reliability Statistics

The combined scale showed good internal consistency with a total Cronbach's alpha of 0.85 for all 20 items (4 for SIN, 5 for FCO, 4 for TRU, 3 for EEX, and 4 for HAB) (Table 3; Bhandari, 2023)

Correlation Analysis

Pearson's correlation coefficients between the constructs are reported in Table 5. Interrelations among the predictors were marked by statistically significant positive correlations revealed between SIN and TRU (r = 0.487, p < 0.001), SIN and FCO (r = 0.361, p = 0.006), and TRU and EEX (r = 0.433, p = 0.001) (Venkatesh et al., 2003; Dwivedi et al., 2017). Nevertheless, there was no immediate impact on the process of habit formation as correlations with HAB were neither very strong nor significant (e.g., SIN and HAB: r = 0.245, p = 0.067; EEX and HAB: r = 0.203, p = 0.134), indicating limited direct impact on habit formation.

Regression Analysis

Multiple linear regression (Table 6) assessed the predictive power of SIN, FCO, TRU, and EEX on HAB. The model yielded a low R² of 0.078, explaining only 7.8% of the variance in HAB, with a non-significant overall fit (F = 1.052, p = 0.390). While FCO (β = 0.103, p = 0.487), TRU (β = -0.133, p = 0.429), and EEX (β = -0.034, p = 0.827) were insignificant predictors, SIN was the strongest (β = 0.277, p = 0.090), and it was on the edge of significance. There was no significant autocorrelation in the residuals, according to the Durbin-Watson statistics (2.259) (Field, 2013).

T-Test Analysis

Independent sample t-tests (Table 7) compared males and females on SIN, FCO, TRU, EEX, and HAB. A significant gender difference was found for SIN (p = 0.030, mean difference = -0.881), with females reporting higher social influence. No significant differences were observed for HAB (p = 0.815), FCO (p = 0.755), TRU (p = 0.970), or EEX (p = 0.588) (Munyoka, 2023).

Discussion

The study found that Social Influence (SIN) is the most significant indicator of independently using e-forms (HAB) in Itahari, with a marginal effect (β = 0.277, p = 0.090). This provides support to the UTAUT model, which stresses the importance of social impact in collectivist countries like Nepal, where opinions from family, friends, and the community influence technology adoption (Venkatesh et al., 2016; Dwivedi et al., 2017). The significant gender difference in SIN (p = 0.030), with females showing more influence, correlates to Munyoka's (2023) study in Zimbabwe, where women were more influenced by social networks (p = 0.025%). This may represent Itahari cultural norms, in which women rely on social encouragement due to a lack of digital confidence or access (Salloum et al., 2020; Venkatesh et al., 2012).

The weak correlations between HAB and predictors (e.g., SIN: r = 0.245, p = 0.067; EEX: r = 0.203, p = 0.134) and low R² (0.078) suggest that SIN, FCO, TRU, and EEX may not fully represent e-form usage patterns. Venkatesh et al. (2016) found a higher R² (0.42) in India, with significant results for SIN ($\beta = 0.34$, p < 0.01) and FCO ($\beta = 0.29$, p < 0.05). The disparity could be attributed to Nepal-specific hurdles such as low digital literacy—85% claimed just basic skills—or inadequate ICT infrastructure. Bhandari (2023) found a marginally significant ($\beta = 0.21$, p = 0.07) correlation between limited internet access and FCO (Okunogbe & Pouliquen, 2022; Rana et al., 2015).

Unexpectedly, FCO (β = 0.103, p = 0.487), TRU (β = -0.133, p = 0.429), and EEX (β = -0.034, p = 0.827) were statistically insignificant. Prior research found these factors important. For instance, AlAwadhi and Morris (2009) showed that Perceived Ease of Use (similar to EEX) was significant in Kuwait (β = 0.31, p < 0.01), suggesting that Itahari's complex interfaces may discourage users (Sá et al., 2016). Similarly, Carter and Bélanger (2005) found trust to be a strong predictor (β = 0.45, p < 0.001), while the negative coefficient for TRU here could reflect Nepalese concerns over data privacy (Bhandari, 2023; Warkentin et al., 2002). FCO's insignificance may relate to unreliable internet or limited digital skills training, reducing the effectiveness of available resources (Al-Adawi et al., 2005; Weerakkody et al., 2013).

The lack of gender differences in HAB, FCO, TRU, and EEX aligns with mixed findings in prior literature. Although Munyoka (2023) observed gender differences for

SIN, other predictors often show no variation, indicating that issues like difficult interfaces or trust barriers affect both genders similarly in Itahari (Venkatesh et al., 2012). The low R^2 and the non-significant regression model (p = 0.390) indicate that other variables—such as digital literacy, awareness, and internet stability might be crucial, as suggested by Bhul (2023).

In summary, Social Influence plays an important role in promoting e-form usage, especially among women. However, limited infrastructure, difficult interfaces, and low trust prevent wider use. Addressing these barriers through focused awareness, simplified platforms, and better digital access is vital for making e-governance more effective in Itahari (Kharel, 2012).

Conclusion

This research analyzed the determinants of the practice of self-service e-form submission for government services in Itahari Sub-Metropolitan City, Nepal, paying attention to Social Influence (SIN), Facilitating Conditions (FCO), Trust in E-Government (TRU), Effort Expectancy (EEX), and Diffusion of Innovations Theory. The results show that SIN is the strongest predictor (β = 0.277, p = 0.090) especially among females (p = 0.030) in line with Nepal's collectivist culture where technology adoption is socially driven (Venkatesh et al., 2016). On the other hand, the weak correlations with HAB (e.g., r = 0.245, p = 0.067 for SIN) and low explanatory power of the regression model (R^2 = 0.078, p = 0.390) suggest that regardless of social influences, factors like digital literacy and ICT infrastructure are more critical in Itahari (Rana et al., 2015; Bhul, 2023).

These findings provide valuable insights for e-governance policies. To mitigate dependence on expensive third-party services, policymakers should focus on targeted awareness campaigns utilizing social influence as well as improving the ease of internet-enabled e-forms and internet reliability. Proactive protective policies, as transparent data security protocols, need to be adopted due to the lack of impact TRU showed as a whole (Warkentin e al., 2002). Enhanced digital literacy initiatives, particularly targeting the 15% of participants exhibiting limited digital competencies, have the potential to significantly enhance the independent utilization of electronic forms (Rana et al., 2015).

The research encompasses certain limitations. The application of non-probability convenience sampling (n = 122) constrains the generalizability of the findings to the wider population of Itahari, and the relatively low R² value indicates that there may be unexamined variables (such as digital literacy and awareness) that could help to influence (Bhul, 2023). Furthermore, the cross-sectional research design limits the understanding of long-term habit formation. Subsequent investigations ought to implement probability sampling, incorporate additional predictors (including Performance Expectancy and internet reliability), and adopt longitudinal methodologies to examine the continued adoption of electronic forms (Dwivedi et al., 2017). Additionally, comparative analyses across various cities in Nepal could yield broader insights into the barriers associated with e-governance.

Finally, this research highlights the maximum significance of social influence in adopting electronic forms in Itahari, simultaneously increasing the call for infrastructure and literacy improvements. In overcoming these setbacks, Nepal can improve its e-readiness, limit reliance on third parties, and increase and increase both the efficacy and coverage of e-governance services, thereby adhering to the Digital Nepal Framework (Sharma, 2020).

Recommendations

Based on the findings that Social Influence (SIN) is the highest predictor of e-forms usage behavioral habits (β = 0.277, p = 0.090) and females possess higher SIN (p = 0.030), policymakers of Itahari Sub Metropolitan City must assign top priority to focused public awareness campaigns for self-adoption of e-forms. Such campaigns could leverage community leaders, influencers at the local level, and women's groups to ensure promotion of e-form usage, particularly among females because they are sensitive to social influence (Munyoka, 2023; Salloum et al., 2020). To address the negligible effects of Facilitating Conditions (FCO, β = 0.103, p = 0.487), Trust in E-Government (TRU, β = -0.133, p = 0.429), and Effort Expectancy (EEX, β = -0.034, p = 0.827), investments in stable ICT infrastructure (for example, persistent internet availability) and user-friendly e-form platforms are needed (Okunogbe & Pouliquen, 2022; Weerakkody et al., 2013).

In addition, digital literacy programs would be implemented targeting 15% of respondents with inadequate digital competence to facilitate e-form navigation and reduce reliance on third-party services (Rana et al., 2015). Transparent data security measures, such as disclosing encryption standards, can encourage trust in the e-governance systems, mitigating TRU's poor influence (Warkentin et al., 2002). These are consistent with the goals of the Digital Nepal Framework for increasing e-readiness and citizen-centric services (Sharma, 2020).

Limitations and Future Research

This research has a number of limitations that compromise its generalizability and explanatory power. The application of non-probability convenience sampling (n = 122) restricts the generalizability of the findings to the larger population in Itahari, as the sample is prone to overestimating technology-savvy or reachable individuals (Saunders et al., 2016). Low R² (0.078) of the model indicates that SIN, FCO, TRU, and EEX explain e-form usage behavior only for a portion of the variance, suggesting untested variables such as digital literacy, internet reliability, or awareness may have an important influence (Bhul, 2023; Rana et al., 2015). Cross-sectional design restricts insights into long-term habit development since e-form adoption may vary over time as individuals become increasingly exposed (Dwivedi et al., 2017).

Future studies should employ probability sampling to enhance generalizability and include additional predictors, for example, Performance, Expectancy, computer literacy skills, or availability of training, to enhance explanatory capability (Venkatesh et al., 2012; Rana et al., 2015). Longitudinal studies could explore how eforming habits change over a period of time, particularly with improved ICT infrastructure in Nepal (Dwivedi et al., 2017). Comparative analyses in other Nepalese urban centers might provide profound insights into e-governance challenges, making reference to the significant role that SIN and gender inequality uncovered in this study (Munyoka, 2023; Zhang & Zhu, 2021).

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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