# Analyzing Taxpayer's Perceived Usefulness, Security, and Ease of Use on Adopting E-Invoice in Value-Added Tax Reporting

Pratik Silwal<sup>1</sup>, Surendra Prasad Joshi<sup>2\*</sup>

<sup>1</sup> Master of Business Studies, Thames International College, Kathmandu, Nepal <sup>2</sup> Tribhuvan University, Thames International College, Kathmandu, Nepal surendrajoshi20@gmail.com (Corresponding author)

Received date: Feb 27, 2025, Revision date: March 15, 2025, Accepted: May 07, 2025

### ABSTRACT

It's essential to reform the government system to modernize tax systems with assist of information communication technology implementation. The Nepal government has actively promoted e-invoicing for value-added tax reporting, beginning with budget ordinances in 2075 B.S. This move aims to streamline tax processes and improve revenue collection, with ongoing government plan policies designed to refine the system further. The research examines the significance of taxpayers' perception for the effective implementation of e-invoice in the Nepalese context. Specifically, it analyzes taxpayer perspectives on the utility, security, and usability of e-invoicing as drivers of early adoption within the VAT reporting framework. This research used descriptive and causal research designs. From the Rupandehi district, primary data with 174 taxpayers was surveyed using a non-probability convenience sampling. The analysis reveals a significant association between taxpayers' perceived usefulness, security, and ease of use and their inclination towards e-invoice adoption. As per the findings there is necessity of concentrating on taxpayer perceptions to properly employ information communication technology implementation solutions such as e-invoicing for increased tax compliance and overall tax system modernization in Nepal and other contexts.

Keywords: Digital government, e-invoice, electronic invoicing, taxpayer perception, technology adoption

### 1. Introduction

Electronic invoicing is preparing, transmitting, and storing invoices electronically using invoicing software. This paradigm shift from paper-based invoices is part of the digital transformation in government revenue services since fiscal year 2075 B.S., factored by the evolution and advancements in Information and Communication Technologies (ICT). The rapid growth in technologies and internet-based services has enabled real-time data processing, secure data storage, and seamless communication between taxpayers and tax authorities, making e-invoicing a more efficient and transparent alternative to paper-based systems (Kalbuana et al., 2020). E-invoicing emerges as a modern, reliable, and effective strategy for handling and processing invoices connected to goods, services, taxes, and diverse things, reducing the need for paper documents and audit trail (Matus et al., 2017). The continuous digital transformation initiatives within businesses involving key processes such as resource management, stock management and production, and receivable management contribute to adopting e-invoicing as part of broader digitization efforts. For example, e-invoicing is aligned with automated payment control and payment processing solutions (Sungkur et al., 2016).

The Inland Revenue Department (IRD) is the government agency in revenue collection and mobilization

in Nepal. IRD is continuously improving its organizational capabilities, structure and services to strengthen the tax ecosystem within its territory. The legal framework allows taxpayers to pay their taxes either direct or indirect on a self-assessment basis. The IRD's efforts to modernize tax administration include adopting ICT solutions like electronic registration, return filing, tax payment and e-invoicing, which are designed to simplify and reinforce tax compliance (IRD, 2080).

In a general approach, adopting e-invoicing offers numerous benefits over paper-based invoices. E-invoices have been proven to reduce the cost and effort associated with printing and storing paper documents, thereby lowering operational costs and promoting environmental sustainability (Kalbuana et al., 2020). Real-time accessibility of data and reporting via internet connectivity enhances transparency, integrity, and accountability as well as facilitates timely reporting to tax authorities. E-invoicing can minimize the risk of errors and fraud, as digital records are less prone to manipulation compared to paper documents (Gale, 2001; World Bank, 2020).

The goal of this study is to evaluate and measure taxpayers' perceptions of the adoption of e-invoice technology to comply with tax rules and regulations, such as monthly VAT reporting. The research aims to find evidence and understand taxpayers' behavior in adopting the changing tax administration using ICT, such as e-invoicing and real-time data synchronization. In addition, identifying the level of awareness among taxpayers in using ICT for tax reporting, and assessing and measuring the impact of e-invoices on maintaining books of account. This study is significant in providing strategy to effectiveness of e-invoice adoption and use of ICT in tax compliance, contributing to the wider understanding of taxpayer behavior and perceptions towards digital tax solutions.

### 2. Literature Review

The Technology Acceptance Model (TAM), for its simplicity and theoretical rationale emphasizing cognitive constructs, directs the factors influencing user acceptance of information technology (Davis et al., 1989; Khadka et al., 2024; Karki et al., 2024). This theory is used to develop the study variables. These factors collectively shape an individual's attitude toward the technology in question. Importantly, TAM aligns with the concepts of "relative advantage" and "complexity" from the IDT, equating them with "perceived usefulness" and "perceived ease of use," respectively. Despite its popularity, TAM has been criticized by scholars who suggest that its main elements may not adequately describe user acceptance of new IT systems, as acceptance variables differ depending on technology, target users, and context. Scholars have refined TAM by adding additional constructs, deleting certain factors, and investigating direct linkages between beliefs and system use. Antecedents such as social influence, image, work relevance, output quality, and outcome demonstrability have been proposed to explain perceived usefulness and simplicity of use (Abbasi et al., 2011; Dahal et al., 2024; Ghimire et al., 2024). Some researchers have also investigated the direct impact of perceived ease of use on behavioral intention, as well as the influence of extrinsic factors, including perceived security, facilitating settings, and awareness (Karki & Dahal, 2024; Shrestha et al., 2023). Furthermore, external characteristics such as information quality, service quality, accessibility, perceived risk, security, and self-efficacy have been incorporated into TAM to explain better perceived usefulness and ease of use, which influence user acceptance. These changes are intended to improve TAM's explanatory capacity in diverse technological situations (Kim & Lee, 2013).

Innovation Diffusion Theory (IDT) explains the gradual spread of innovative ideas or products within populations or social systems over time (Rogers, 1995). As individuals adopted these innovations, they departed from established practices to adapt to newer and advanced practices that have a positive impact on their lifestyle. The process of adoption undergoes stages including awareness, decision-making, experimentation, and sustained usage (Dahal et al., 2023; Ghimire et al., 2023). Many studies have combined IDT and TAM to explore technological acceptance behavior (Chang & Tung, 2008). However, few have investigated all IDT properties via TAM integration. This study improves TAM by combining IDT characteristics, adding compatibility, complexity, relative advantage, and the capacity to attempt and observe as additional components to increase the study's credibility and effectiveness.

#### Hypotheses Development

Recent studies emphasize the importance and potential of e-invoicing in enhancing tax administration and compliance across various jurisdictions. Bojanc et al. (2024) emphasized the digital revolution's role in driving sustainable transformations, with e-invoicing emerging as a crucial component. Their research in Slovenia revealed that while organizations recognize e-invoicing benefits, notable barriers persist, including challenges related to the business environment, awareness gaps, and implementation expertise. Similarly, Hesami et al. (2024) underlined e-invoicing's key role in reducing tax compliance costs and improving administrative efficiency, noting its global impact on tax practices. It shows important benefits, such as lower financial costs for firms, particularly during the development phase and improved effectiveness in implementing tax processes. Gunawan and Pramesti (2023) demonstrated in Indonesia that e-Faktur (e-invoicing system for VAT declaration in Indonesian tax law) modernized VAT procedures, significantly facilitated accounting and VAT reporting processes at PT Cipta Medika Indonesia. Latifa et al. (2023) further supported these findings, indicating e-invoicing's positive impact on taxpayer compliance and state revenue.

Works on invoicing by Wagiman et al. (2023) and Walakandou et al. (2023) highlighted that e-invoicing increases efficiency and user satisfaction. Cases in Peru (Bellon et al., 2022) and Indonesia (Irawati et al., 2022) demonstrate how implementing an e-invoicing system can significantly improve tax compliance and revenue collection, particularly when integrated with other reforms. However, challenges such as technical expertise shortages and infrastructure limitations require strategic interventions from governments (Gurung et al., 2024; Nurdiansyah et al., 2021). The empirical works and findings support the implementation of e-invoicing systems, advocating for government assistance, training, and awareness campaigns to enhance adoption and effectiveness. Based on TAM, consumers' perceptions of the usefulness and ease of use of technology influence their opinions. Davis et al. (1989) found that by recognizing the benefits of new technology, individuals are more likely to adopt that technology.

Hernandez-Ortega (2012) Rahi et al. found that perceived usefulness and perceived ease of use positively impact willingness to adopt technology. (2018) found that performance and effort expectancy positively affect intentions to use Internet banking in Pakistan. Perceived Security is an essential factor that must be carefully considered when an individual intends to adopt any newer technology or services (Dahal & Joshi, 2024). Perceived security is a user's perception of how well they are protected from potential risk and threats (Yousafzai et al., 2003). Prior studies have found that there is a positive relationship between

security and user intention (Hernandez-Ortega, 2012). Furthermore, taxpayers' perception of security is affected by their belief in the legal control system and protection mechanisms (Felix & Wella, 2019). In the context of e-invoicing, strict compliance with security requirements is essential as it enhances the reliability of transactions. The study has the following three hypotheses based on the study framework:

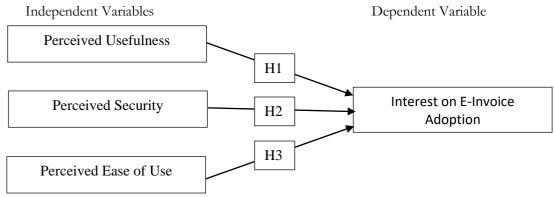


Figure 1: Study Framework

### Hypotheses Statements

- *H1:* Perceived usefulness has a positive and significant influence towards taxpayer's interest in adoption of e-invoice.
- *H2*: Perceived security has a positive and significant influence towards taxpayer's interest in adoption of e-invoice.
- *H3*: Perceived ease of use has a positive and significant influence towards taxpayer's interest in adoption of e-invoice.

# 3. Research Methodology

The study employs descriptive and causal research designs, which are supported by a thorough evaluation of the literature on taxpayers' motivations and interest in adopting e-invoices. The descriptive technique provides information regarding the features of taxpayers' intents to use e-invoices and related elements, whereas the causal method looks into cause-and-effect relationships between variables.

This study is of registered taxpayers in Nepal from various industry sectors who are registered under Nepal's VAT legislation from Rupandehi District of Nepal. The taxpayer(s) included in this study were chosen using a non-probability, convenience sampling method. A total of 174 valid questionnaires were returned in December 2024. Because of the enormous number of taxpayers, the study used a sample of 200 respondents from the Slovin formula with a 5% error rate.

### Instrumentation

This research employed a five-point Likert scale from 1 = strongly disagree to 5 =strongly agree. The factors in this study were measured using existing literature, with modifications made to fit the context of Nepalese taxpayers, for a total of 28 items. Table 1 lists the measurements of variables. A questionnaire was created for collecting data from proprietors, managers, and/or accountants of company units in Nepal, primarily in business sectors, with data collection taking place from September 2024 to December 2024.

		Table 1: Measurement of Variables
Variables		Items
Perceived	PU1	Processing time of e-invoice is reduced.
Usefulness (PU)	PU2	Work efficiency is enhanced.
	PU3	The convenience of transactions has increased.
	PU4	Costs of processing transactions are reduced.
	PU5	Effortful processing of invoices is achieved.
	PU6	The quick issuance & delivery of invoices is possible.
	PU7	There are high costs on implementation of e-invoicing.
Perceived Security	PS1	Transactions are safely recorded and transmitted.
(PS)	PS2	Data is kept secret & maintained confidential by the third parties.
	PS3	E-invoice is not able to be manipulated.
	PS4	It ensures the safe transmission of information.
	PS5	The e-invoice has provided more control over security measures.
Perceived Ease of	PEOU1	Effortless to learn how to use e-invoice in business process.
Use (PEOU)	PEOU 2	It is easy to process e-invoice due to its simplicity and features.
	PEOU 3	Simple to remember how to use e-invoice in business process.
	PEOU 4	Implementation of e-invoice is simple and user friendly.
	PEOU 5	Lower error rate is achieved in vat calculation & reporting.
	PEOU 6	Business process tracking is streamlined for AR & AP.
	PEOU 7	Reduction of employee time in processing e-invoice.
	PEOU 8	E-invoice has caused business process automation.
Intention of Adopt	IAEI1	Satisfied with the use of e-invoice for business purpose.
E-Invoice (IAEI)	IAEI 2	E-invoice is more convenient than paper invoice.
	IAEI 3	E-invoice is environmentally friendly.
	IAEI 4	Recommend others due to its benefits.
	IAEI 5	Better utility and usefulness in adopting e-invoice.
	IAEI 6	Use of e-invoice provides security and data management.
	IAEI 7	Adoption of e-invoice grants ease of conveniences.
	IAEI 8	Adopt e-invoice in my business regardless of legal issues.

Table 1: M	leasurement of	of V	<i>Variables</i>
------------	----------------	------	------------------

The study used Microsoft excel for data organizing and SPSS 26 for statistical analysis. The study's model is outlined in the equation below.

 $LAEI(Y) = \beta_0 + \beta_1 PU + \beta_2 PS + \beta_3 PEOU + e$ 

Where,

IAEI	= Intention to adopt e-invoice
PU	= Perceived usefulness
PS	= Perceived security
PEOU	= Perceived ease of use
е	= error term.

The study used ethical research methodologies, ensuring that respondents engaged independently of one another, in confidence, and in secret. Before submitting the questionnaire, the researchers briefed respondents about the study's goals and gained their agreement.

# 4. Data Presentation and Analysis

This section of the research shows the study results.

# **Demographic Structure**

The study demographics show the industry sector, the business in operation, annual turnover of taxpayers.

	Table 2: Demographic Structure				
Variable	Category	Ν	Percentage		
Industry sector	Construction & contracts	9	5.20		
	Manufacturing	37	21.30		
	Services	35	20.10		
	Trading & distribution	93	53.40		
Business in operation	0 to 5 Years	61	35.10		
	5 to 10 Years	54	31		
	10 to 15 Years	22	12.60		
	15 Years & Above	37	21.30		
Annual turnover	Below NPR 10 Cr	17	9.80		
	NPR 10 – 20 Cr	83	47.70		
	NPR 20 – 35 Cr	34	19.50		
	NPR 35 – 50 Cr	18	10.30		
	NPR 50 – 100 Cr	9	5.20		
	NPR 100 Cr & Above	13	7.50		
	Total	174			

Table 2 presents the demographic structure of the respondents participating in the survey. Most of the respondents (53.4%) operate in the trading & distribution sector, followed by manufacturing (21.3%) and services (20.1%). Regarding business operation tenure, 35.1% of respondents have been in operation for 0 to 5 years, while 31% have been operating for 5 to 10 years. In terms of annual turnover, nearly half of the respondents (47.7%) fall within the NPR 10-20 Cr range, with 9.8% reporting below NPR 10 Cr and the remainder reporting above NPR 20 Cr.

# **Reliability and Validity**

Cronbach's alpha was used to test the internal coherence of each measurement scale, and the results showed adequate reliability indices across all constructs, supporting the measurements' stability and consistency. Table 3 displays the internal coherence indices for the measurement scales utilized in this study, as evaluated in terms of value of Cronbach's alpha. The results from Table 2 indicate that all scales show strong internal reliability, with Cronbach's alpha values more than the generally accepted threshold of 0.70. It is confirming that the measurement instruments employed in this research are consistent and reliable for further statistical analysis.

Table 3: Reliability of the Measurement Scales

	•	
Measurement of Scale	Items	Cronbach's Alpha

Perceived Usefulness (PU)	7	0.832
Perceived Security (PS)	5	0.845
Perceived Ease of Use (PEOU)	8	0.941
Intention to Adopt E-Invoice (IAEI)	8	0.824
Total	28	0.953

### **Descriptive Statistics**

This section of the study shows a descriptive overview of the main factors examined, which include perceived usefulness, perceived security, perceived ease-of-use, and the incentives to utilize e-invoices.

Variable	N	Minimum	Maximum	Mean	Std. Deviation
PU	174	1.00	4.63	3.782	0.627
PS	174	2.40	5.00	4.124	0.651
PEOU	174	1.00	5.00	4.034	0.841
IAEI	174	2.63	4.88	4.369	0.425

**Table 4:** Descriptive Statistics for Variables

Table 4 shows mean value for perceived usefulness is 3.782, indicating a moderate level of perceived usefulness, with a standard deviation of 0.627, suggesting a moderate variability in these perceptions among the participants in the context of faster processing of e-invoices in the business operation. The perceived security in the use of E-Invoice has a mean value of 4.124, reflecting a relatively higher degree of confidence in the security aspects of E-Invoice, accompanied by a standard deviation of 0.651, indicating a moderate spread of responses regarding security perceptions concerning third-party confidentiality. The perceived ease-of-use of E-Invoice, with a mean value of 4.034, suggests that participants generally find E-Invoice easy to use. However, the standard deviation of 0.841 shows a higher variability in ease-of-use perceptions compared to other variables suggesting policymakers should focus on providing adequate training and support to address potential learning challenges and facilitate smoother adoption. The intention to adopt E-Invoice is particularly strong, with a mean value of 4.369, indicating a strong willingness to adopt E-Invoice among the participants, and the standard deviation of 0.425 is the lowest among all variables, suggesting a consistent intention to adopt across the sample. These findings collectively suggest that while there is a moderate perception of usefulness, there is a strong intention to adopt E-Invoice, driven by high perceived ease of use and security, which can provide helpful information for policymakers and businesses aiming to promote the adoption of electronic invoicing systems.

#### **Correlation Analysis**

This study examines the correlation between taxpayers' perceptions of usefulness, security, and ease of use, and their intention to adopt e-invoicing within Nepal's tax ecosystem. Table 5 presents the correlation matrix for PU, PS, PEOU, and IAEI. All correlations are significant at the 0.01 level (2-tailed). IAEI, the dependent variable, has the most significant correlation with PEOU (r = 0.775), followed by PUU (r = 0.760) and PS (r = 0.619). This shows that taxpayers who see e-invoicing as simple and beneficial are more likely to employ it in their business operations, with ease of use showing a somewhat stronger correlation. Perceived security has a favorable influence on adoption intention, however to a smaller amount than usefulness and convenience. Among the independent variables, PU and PEOU exhibit a substantial positive correlation (r = 0.699), which shows that perceptions of usefulness and ease of use are favourably related. PS also has a positive correlation with both PU (r = 0.525) and PEOU (r = 0.615), indicating that perceptions of security are linked to favorable judgments of usefulness and ease-of-use.

Variab	les PUU	PS	PEOU	IAEI
PU	1			
PS	.525**	1		
PEOU	.699**	.615**	1	
IAEI	.760**	.619**	.775**	1

\*\*. Correlation is significant at the 0.01 level (2-tailed).

### Test of Multicollinearity

The test of Multicollinearity among independent variables is investigated by evaluating the VIF indices.

Tuble	• Connearity Statistics Table	
Variables	Tolerance	VIF
PU	.497	2.014
PS	.604	1.656
PEOU	.426	2.346

# **Table 6:** Collinearity Statistics Table

Table 6: VIF values are well within the range of 1 to 10; it can be concluded that multicollinearity does not pose a substantial issue for the subsequent regression analysis.

### Multiple Regression Analysis

Table 7 displays the model summary for the regression study, which examined the intention to implement E-Invoice as a shift in the government's fiscal policy.

### Table 7: Model Summary of Intention to Adopt E-Invoice

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.843ª	.711	.706	.23045

a. Predictors: (Constant), Perceived ease of use of e-invoice, perceived security in use of e-invoice, perceived use & utility of e-invoice

b. Dependent variable: Intention to adopt e-invoice

The model displays a significant correlation between the variables. The R Square value indicates that the independent predictors account for about 71.1% of the variance in intention to implement E-Invoice. The adjusted R Square indicates a well-fitted model. The Standard Error represents the average deviation of actual data from projected values in the regression model.

	Table 8: ANOVA Table							
	Model Sum of Squares Df Mean Square F S							
1	Regression	22.216	3	7.405	139.447	.000 <sup>b</sup>		
	Residual	9.028	170	.053				
	Total	31.244	173					

- a. Dependent variable: Intention to adopt e-invoice
- b. Predictors: (Constant), Perceived ease of use of e-invoice, perceived security in use of e-invoice, perceived use & utility of e-invoice

Table 8 demonstrates the model's overall effectiveness in explaining variance beyond what would be expected by chance. The Regression row reveals a substantial Sum of Squares of 22.216, resulting in a mean square regression of 7.405. In comparison, the Residual Sum of Squares is lower (9.028), resulting in a Mean Square Residual of 0.053. The calculated F-statistic of 139.447, which comes from the ratio of mean square regression to mean square residual, is quite high. The significance value (Sig.) is indicated as. 000 (p < 0.001), which is significantly lower than the alpha criterion of .05. This highly substantial p-value provides persuasive statistical evidence against the null hypothesis that the model has no explanatory power. Instead, it strongly supports the alternative hypothesis, confirming that the regression model, which includes perceived ease of use, perceived security, and perceived usefulness of e-invoice, is statistical significance and effectively explains a significant portion of the variance in intention to adopt e-invoice.

	Table 7. Regression Coefficients							
Model		Uns	tandardized	Standardized	t	Sig.	Collinea	urity
		Co	oefficients	Coefficients			Statisti	ics
		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.097	.126		16.626	.000		
	PU	.268	.040	.396	6.761	.000	.497	2.014
	PS	.110	.035	.169	3.188	.002	.604	1.656
	PEOU	.199	.032	.394	6.245	.000	.426	2.346

Table 9: Regression Coefficients

a. Dependent Variable: Intention to adopt E-Invoice

Table 9 shows the regression coefficients produced from the analysis predicting intention to use e-invoice, including both unstandardized (B) and standardized (Beta) coefficients, as well as their t-statistics and significance levels. The model's constant term, 2.097, has a highly significant p-value (<.001) and predicts the intention to implement e-invoice when every single independent variable is zero. In terms of predictors, PU has a positive, statistically significant effect (B =.268, Beta =.396, t = 6.761, p <.001), indicating that an increase of one unit in PU leads to a.268 unit rise in intention to adopt e-invoice, while other variables remain constant. Similarly, Perceived Security (PS) has an effect that is statistically significant (B =.110, Beta =.169, t = 3.188, p = .002), demonstrating a positive link, but less strong than PU. PEOU has a substantial positive influence (B =.199, Beta = .394, t = 6.245, p <.001), with a one-unit rise in PEOU resulting in a .199-unit increase in intention. This model is mathematically represented by the provided regression equation, Y = 2.097 + 0.268PU + 0.110PS + 0.199PEOU, where Y denotes intention to adopt e-invoice, 2.097 is the intercept (b<sub>0</sub>), and 0.268, 0.110, and 0.199 are the unstandardized regression coefficients (b<sub>1</sub>, b<sub>2</sub>, b<sub>3</sub>) for hypotheses H<sub>1</sub> (perceived usefulness), H<sub>2</sub> (perceived security), and H<sub>3</sub> (perceived ease-of-use). All predictor variables make significant contributions to the estimation of the intention to utilize e-invoice.

## 5. Discussion and Conclusion

The findings of this study strongly align with the foundational principles of the Technology Acceptance Model (TAM), signifying that perceived usefulness, ease of use, and security have a significant impact on taxpayers' intention to use e-invoicing for VAT reporting in Nepal. The empirical findings support Davis et al.'s (1989) hypothesis that people are more likely to adopt technology if they believe it is useful and simple to use. In the current study, perceived ease of use and perceived usefulness had the strongest correlation with the intention to adopt, emphasizing their importance in influencing adoption behaviour. This is consistent with the findings of Hernandez-Ortega (2012), who confirmed the positive impact of these perceptions on willingness to use technology. Furthermore, Rahi et al. (2018) came to similar conclusions in the context of Internet banking, demonstrating the universality of TAM across technological platforms.

Although perceived security was slightly less influential, it still had a significant impact on adoption intention, highlighting the importance of risk and protection in user decisions (Bhattarai et al., 2020; Hernandez-Ortega, 2012; Yousafzai et al., 2003). This supports Felix and Wella's (2019) assertion that trust in legal frameworks and control systems shapes security perceptions, particularly for compliance-based technologies such as e-invoicing. In contrast to the findings of this study, Bojanc et al. (2024) found that, while the benefits of e-invoicing are widely recognized, significant barriers to adoption remain, including awareness gaps and environmental constraints. These challenges may be less pronounced in the Nepalese context under consideration, possibly due to proactive policy interventions or a narrower implementation scope. Similarly, Hesami et al. (2024) emphasized the potential for cost savings and administrative efficiency through e-invoicing, which is consistent with the perceived usefulness highlighted in this study. However, they also mentioned the development and infrastructure costs, which are not directly addressed in this study.

Furthermore, empirical evidence from Indonesia by Gunawan and Pramesti (2023) and Irawati et al. (2022) shows that structured e-invoicing systems such as e-Faktur significantly improve compliance and simplify reporting, which matches the convenience perceived by Nepalese taxpayers in this study. In contrast, Nurdiansyah et al. (2021) emphasised the importance of addressing technical expertise and infrastructure limitations, which may arise in Nepal as the system expands. The integration of government support and training, as recommended by Latifa et al. (2023) and Wagiman et al. (2023), supports this study's conclusion that policy efforts should focus on improving the perceived utility and usability of e-invoicing systems in order to increase adoption.

In conclusion, while the study validates the TAM framework and is supported by various international evidence, it also focuses on contextual differences in implementation. Although the quantitative findings show Nepalese taxpayers have strong intentions to adopt e-invoicing, successful nationwide integration will most likely depend on addressing potential gaps in awareness, technical readiness, and infrastructure. As a result, policymakers must combine technological advancements with capacity-building initiatives to fully realize the benefits of e-invoicing systems.

## 6. Limitations and Future Scope

This study's research findings make significant suggestions and theoretical advancements to the field of Nepal's tax ecology, notably in terms of future legislation and standards controlling e-invoicing. The study emphasizes the significance of taxpayer perceptions in affecting the widespread use rate of e-invoices. To increase voluntary adoption of VAT reporting functions by firms and other registered taxpayers, fiscal strategies should prioritize the user experience, emphasizing the perceived value and convenience of use of e-invoice systems. This necessitates the creation of e-invoice software that interfaces seamlessly with current accounting infrastructure while being versatile enough to work with various organizational systems. System design must be responsive to the unique needs of different business types while protecting data integrity. Regulatory organizations should issue comprehensive guidance and manuals to help businesses and individual taxpayers navigate the early adoption process effectively. Theoretically, this study adds to the existing body of information by giving a more in-depth understanding of the factors influencing e-invoice uptake at both the individual and organizational levels.

Recognizing the increasing importance of e-invoicing from a simple office tool to a strategic organizational resource is crucial for taxpayers, highlighting its growing importance in contemporary business strategy. Lessons learned from early adopters and best practices also offer crucial information for promoting wider e-invoice diffusion and utilization in the tax ecosystem of Nepal. Effective strategies include leveraging early adopter firms as benchmarks of innovation and improvement to disperse practical knowledge and demonstrate the tangible benefits of adopting e-invoicing. Clear and consistent communication to taxpayers highlighting the advantages of e-invoicing through targeted training, workshops, and informational campaigns by government agencies is essential. Investing in robust security measures to build user trust and developing intuitive, standardized e-invoice systems compatible with common business practices are critical factors in facilitating successful and widespread adoption across diverse organizational contexts.

# References

Abbasi, M., Chandio, F., Soomro, A., & Shah, F. (2011). Social influence, voluntariness, experience and the internet acceptance: An extension of technology acceptance model within a south-Asian country context. *Journal of Enterprise Information Management*, 24(1), 30-52.

Bellon, M., Dabla-Norris, E., Khalid, S., & Lima, F. (2022). Digitalization to improve tax compliance: Evidence from VAT e-invoicing in Peru. *Journal of Public Economics*, 2022(210), 104661-104688. https://doi.org/10.1016/j.jpubeco.2022.104661

Bhattarai, G., Pokharel, D. R., Dahal, R. K., & Sharma, S. (2020). Abusive supervision and withdrawal behaviors: Defensive role of ability-job-fit. *The Saptagandaki Journal*, *XI* (11), 98–120. https://doi.org/10.3126/sj.v11i0.36900

Bojanc, R., Pucihar, A., & Lenart, G. (2024). E-invoicing: A catalyst for digitalization and sustainability. *Organizacija*, 57(1), 3-19. https://doi.org/10.2478/orga-2024-0001

Chang, S., & Tung, F. (2008). An empirical investigation of students' behavioural intentions to use the online learning course websites. *British Journal of Educational Technology*, *39*(1), 71-83.

Dahal, R. K., & Joshi, S. P. (2024). The application of e-recruitment by job seekers and the impact of perceived values in Nepal. *Journal of Management Changes in the Digital Era*, 1(1), 108–128. http://dx.doi.org/10.33168/JMCDE.2024.0108

Dahal, R. K., Ghimire, B., & Joshi, S. P. (2023). Post-purchase satisfaction on life insurance policies: Evidence from Nepal. *Journal of System and Management Sciences*, *13*(5), 17–30. http://dx.doi.org/10.33168/JSMS.2023.0226

Dahal, R. K., Ghimire, B., Gurung, R., Karki, D., & Joshi, S. P. (2024). Management accounting's role in decision-making and efficacy. *Cogent Business & Management*, 11(1). https://doi.org/10.1080/23311975.2024.2433165

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, *35*(8), 982-1003. https://doi.org/10.1287/mnsc.35.8.982

Felix, & Wella. (2019). Does Generation X Intend to Use E-Wallet in Daily Transactions? 2019 4th Technology Innovation Management and Engineering Science International Conference (TIMESiCON). Bangkok, Thailand: Institute of Electrical and Electronics Engineer. https://doi.org/10.1109/TIMES-iCON47539.2019.9024379

Gale, W. G. (2001). *Tax simplification: Issues and options*. Washington DC: Brookings Institution. Retrieved from https://www.brookings.edu/wp-content/uploads/2016/06/20010910.pdf

Ghimire, B., Dahal, R. K., & Rai, B. (2023). The attitude of flexible work arrangement on academics' job satisfaction: The emerging market case. *Journal of System and Management Sciences*, *13*(2), 370–383. http://dx.doi.org/10.33168/JSMS.2023.0226

Ghimire, B., Dahal, R. K., & Singh, S. (2024). Data-driven insights into enhancing employee performance through work-life improvements in Nepalese small and medium enterprises. *Journal of Logistics, Informatics and Service Science, 11*(6), 167–183. http://dx.doi.org/10.33168/JLISS.2024.0610

Gunawan, E., & Pramesti, R. A. (2023). Calculation, deposit, reporting, and recording of VAT accounting with e-invoice on PT. Cipta Medika Indonesia. *Neo Journal of economy and social humanities*, 2(3), 177-185. http://dx.doi.org/10.56403/nejesh.v2i3.127

Gurung, R., Dahal, R. K., Ghimire, B., & Dahal, P. (2024). Non-performing assets and bank profitability in Nepal: Evidence from a panel data. *Journal of Logistics, Informatics and Service Science, 11*(3), 384–398. http://dx.doi.org/10.33168/JLISS.2024.0325

Hernandez-Ortega, B. (2012). Key factors for the adoption and subsequent use of e-invoicing. *Academia, Revista Latinoamericana de Administración*, 15–30.

Hesami, S., Jenkins, H., & Jenkins, G. P. (2024). Digital transformation of tax administration and compliance: A systematic literature review on e-invoicing and prefilled returns. *Digital Government: Research and Practice*, 1–23. http://dx.doi.org/10.1145/3643687

Irawati, I., Sofyan, M., Darmawan, H., & Serebryakova, T. (2022). The effect of the implementation of e-invoice 3.0 and taxable person compliance on value added tax revenue at KPP Pratama Pasar Rebo. *Ilomata International Journal of Tax and Accounting*, 3(1), 1–12. http://dx.doi.org/10.52728/ijtc.v4i1.412

IRD. (2080). *Annual report 2079/080*. Kathmandu: Ministry of Finance Inland Revenue Department. Retrieved December 2023, from https://ird.gov.np/public/pdf/755996332.pdf

Kalbuana, N., Solihin, Saptono, Yohana, & Yanti, D. R. (2020). The influence of capital intensity, firm size, and leverage on tax avoidance on companies registered in Jakarta Islamic Index (JII) period 2015-2019. *International Journal of Economics, Business and Accounting Research*, 4(3), 272–278.

Karki, D., & Dahal, R. K. (2024). Service quality dimensions and investor satisfaction on online stock trading system in Nepal. *Journal of Service, Innovation and Sustainable Development*, 5(1), 63–81. http://dx.doi.org/10.33168/SISD.2024.0106

Karki, D., Dahal, R. K., Bhattarai, G., Ghimire, B., & Joshi, S. P. (2024). Impact of fiscal and macroeconomic imbalances on economic growth: A context of regulation. *Journal of Governance & Regulation*, *13*(3), 84–95. https://doi.org/10.22495/jgrv13i3art7

Khadka, P. B., Karki, D., Dahal, R. K., & Khanal, D. (2024). Mapping the landscape of green finance and banking performance research: A bibliometric analysis. Journal of Service, Innovation and Sustainable Development, 5(1), 176–193. https://doi.org/10.33168/SISD.2024.0110

Kim, J., & Lee, H. (2013). Key factors influencing customer satisfaction in Korea's mobile service sector. *Journal of Internet Banking and Commerce*, 18(3), 1–13.

Latifa, F., Ritchi, H., & Tanzil, N. D. (2023). Journey and performance of e-tax invoicing in Indonesia: A systematic literature review. *Jurnal Riset Akuntansi dan Bisnis Airlangga*, 8(1), 1395–1417. http://dx.doi.org/10.20473/jraba.v8i1.42077

Matus, A., Guerra, E., Fuertes, W., Gómez, M., Aules, H., Villacís, C., & Toulkeridis, T. (2017). On the development of an electronic invoicing solution to integrate SMEs with a tax-collection egovernment-platform. *Fourth International Conference on eDemocracy & eGovernment (ICEDEG)*, 94–101. https://doi.org//10.1109/ICEDEG.2017.7962518

Nurdiansyah, D. H., Nawawi, A., Kosasih, K., & Sundamanik, S. J. (2021). Analysis of e-invoice implementation in input tax control (case study at PT.TT Metals Indonesia). *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 15(1), 118–125. http://dx.doi.org/10.32815/jibeka.v15i1.169

Rahi, S., Ghani, M., Alnaser, F. M., & Ngah, A. (2018). Investigating the role of unified theory of acceptance and use of technology (UTAUT) in internet banking adoption context. *Management Science Letters*, 8(3), 173–186. http://dx.doi.org/10.5267/j.msl.2018.1.001

Rogers, E. M. (1995). Diffusion of Innovations, 5th Edition. New York: The Free Press.

Shrestha, I., Dahal, R. K., Ghimire, B., & Rai, B. (2023). Invisible barriers: Effects of glass ceiling on women's career progression in Nepalese commercial banks. *Problems and Perspectives in Management*, 21(4), 605–616. http://dx.doi.org/10.21511/ppm.21(4).2023.45

Sungkur, R. K., Gangabaksh, Y., & Rutah, N. (2016). Cloud-based cross-platform push notification system for more informed learners. 2016 IEEE International Conference on Emerging Technologies and Innovative Business Practices for the Transformation of Societies (EmergiTech), (pp. 229–234). Balaclava, Mauritius. https://doi.org/10.1109/EmergiTech.2016.7737344

Wagiman, A. N., Aspasya, G. S., & Prawati, L. D. (2023, May 17). Net benefit on e-invoice implementation: Applying the Delone & McLean information systems success model. *388*(E3S Web of Conference), p. 9. http://dx.doi.org/10.1051/e3sconf/202338804054

Walakandou, O. G., Sondakh, J. J., & Budiarso, N. S. (2023). E-receipt based value added tax accounting treatment at CV Mega Lestari Manado. *Journal of Governance, Taxation and Auditing,* 1(3), 253–258. http://dx.doi.org/10.38142/jogta.v1i3.518

World Bank. (2020). *Doing Business 2020*. USA: World Bank Group. Retrieved from https://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf

Yousafzai, S., Pallister, J., & Foxall, G. (2003). A proposed model of e-trust for electronic banking. *Technovation*, 23(11), 847–860. https://doi.org/10.1016/S0166-4972(03)00130-5