To Assess the Impact of Online Tax Systems on Small Business Owners' Tax Compliance Behavior

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ABSTRACT

This study investigates the impact of online tax systems on the tax compliance behavior of small business owners, addressing both technological and behavioral dimensions. While previous research has emphasized system usability, trust, and efficiency, there remains a significant gap in understanding how socio-economic, psychological, and demographic factors influence compliance decisions—particularly among informal and rural enterprises. The primary objective of this research is to evaluate how online tax systems shape compliance behavior, while secondary objectives explore the perceived benefits and challenges of these systems, the role of ease of use, trust, and data security, and how individual characteristics such as age, education, and business experience affect adoption. Using empirical data from small business owners, the study highlights cyber security concerns, varying levels of digital literacy, and limited confidence in system accuracy as key barriers to voluntary compliance. This aligns with broader concerns in digital finance and e-governance, where perceived security risks can significantly impact user engagement. The results indicate that half of the respondents are concerned about cyber threats when using online tax systems. This reflects a significant trust issue that could hinder wider adoption. The study reveals important insights into small business owners' perceptions of online tax systems. Nearly half of the respondents expressed concern over cyber threats, highlighting trust and data security as major barriers to adoption.

Keywords: Online Tax Systems, Compliance Behaviour, Digital Tax Platforms, Digital Literacy.

Introduction

Tax compliance is a critical element of a country's economic stability and development. Governments rely on tax revenues to fund infrastructure, social services, and public administration. However, ensuring consistent and accurate tax compliance remains a challenge, particularly among small business owners who often lack the resources and expertise of larger corporations. Traditionally, tax compliance has involved manual, paper-based systems, which are time-consuming and prone to errors. In response, many governments around the world have introduced online tax systems, also referred to as e-taxation systems, to simplify the tax process, improve compliance, and reduce costs for both the state and the taxpayer.

Online tax systems are designed to automate and streamline tax-related procedures such as registration, filing, payment, and record keeping. These systems offer several advantages, including reduced paperwork, faster processing, increased transparency, and the convenience of remote access. For small business owners—who often operate with limited manpower and time—these systems can offer significant relief. However, the effectiveness of such systems in improving tax compliance behavior depends on a variety of factors: the system's usability, digital infrastructure, taxpayer education, and trust in government institutions, among others.

This study aims to assess the impact of online tax systems specifically on small business owners' tax compliance behavior. It explores whether these systems are achieving their intended purpose or whether they are falling short due to practical challenges such as digital illiteracy, technical issues, or lack of awareness.

Research Gap

Despite a growing body of literature highlighting the positive influence of online tax systems on tax compliance among small business owners, several critical gaps remain underexplored. Many studies (e.g., Shukla & Kumar, 2019; Nguyen et al., 2023) have focused primarily on technological and system-related factors such as usability, trust, and system quality, yet few have holistically examined behavioral, socio-economic, and psychological dimensions that influence compliance decisions. While some research (e.g., Wanjagi & Ondabu, 2019) highlights the significance of digital literacy, most fail to investigate the diverse challenges faced by informal sector businesses or those in rural areas with limited digital infrastructure. Additionally, although compliance outcomes have been linked to online system efficiency, few studies have empirically assessed the long-term behavioral changes induced by such systems or differentiated between voluntary and enforced compliance. Moreover, cross-country comparisons are limited, with much of the current work being context-specific and not easily generalizable across different tax jurisdictions or economic conditions.

Objectives

- To identify the perceived benefits and challenges of using online tax systems among small business owners (e.g., usability, accuracy, cost).
- To examine the relationship between perceived ease of use and willingness to comply with tax regulations.
- To analyze the role of trust and data security in influencing tax compliance via online systems.
- To evaluate how the use of online tax systems influences the tax compliance behavior of small business owners.

Research Questions

- I worry about potential cyber threats when filing taxes online
- Online tax systems make it easier for tax authorities to monitor compliance
- I feel more confident about the accuracy of my tax filings when using an online tax system

Significance of the Study

This study is significant as it provides valuable insights into how online tax systems influence tax compliance behavior among small business owners, a group that plays a crucial role in national economic development yet often faces challenges in meeting tax obligations. By examining both technological aspects (such as usability and system efficiency) and behavioral factors (such as trust, digital literacy, and perceived security), the study offers a more comprehensive understanding of what drives or hinders compliance in a digital environment. It addresses critical gaps in existing literature by considering the unique challenges faced by informal businesses and those in rural or under-resourced areas. The findings can guide policymakers, tax authorities, and system developers in designing more inclusive, accessible, and effective online tax platforms. Ultimately, this research contributes to improving voluntary tax compliance, enhancing revenue collection, and promoting fairer participation in the tax system

Literature Review

Shukla & Kumar (2019): This study explored the adoption of India's Goods and Services Tax Network (GSTN) among small businesses. Using an extended Technology Acceptance Model (TAM) integrated with trust factors, the research found that trust in the system significantly influenced the intention to use online tax services. Challenges such as technical issues, lack of computer literacy, and system complexities were identified as barriers to adoption. The study emphasized the need for trust-building measures and user-friendly interfaces to enhance compliance.

Nguyen et al. (2023): Analyzing factors affecting the acceptance of online tax filing and payment systems by micro, small, and medium enterprises in Vietnam, this study employed an adoption model integrating the Technology Acceptance Model and Information System Success Model. Results indicated that information quality, system accessibility, and responsive service quality significantly

influenced adoption, while social influence did not have a notable effect. The study suggested that policymakers focus on enhancing system quality and user support to increase adoption rates.

Bhalla et al. (2022): This study examined the effect of tax knowledge and technological shifts in the tax system on business performance among Indian MSMEs. Findings indicated that increased tax awareness and adoption of digital tax systems positively influence operational efficiency and compliance. The study highlighted the importance of training and education in facilitating this transition.

Nhundu & Matamande (2023): This research investigated the impact of online tax systems on tax compliance among small to medium enterprises in Harare, Zimbabwe. The study found a positive relationship between computer literacy levels and tax compliance, indicating that increased digital proficiency among SMEs leads to better compliance. However, the overall adoption of the online filing system remained below the national average, suggesting the need for further initiatives to promote digital literacy

Wanjagi & Ondabu (2019): Focusing on micro, small, and medium enterprises at Kangemi Harambee Market in Kenya, this study assessed the effects of online tax registration, filing, and remittance on tax compliance. The research found that all three online processes positively and significantly influenced tax compliance. The study recommended that the Kenya Revenue Authority provide training to SMEs to enhance understanding and usage of the online tax filing system.

Research Methodology

Research Design

This study adopts a Descriptive research design to systematically explore and present the current digital marketing services, strategies, trends, and analysis used in website and app development.

Sampling Method

Convenience sampling is used to select participants based on their accessibility and willingness to participate

Sampling Size

The total sample size of the study is 113.

Data collection Method

Primary data was collected directly from employees using structured questionnaires for this study.

Data Analysis Tools

Correlation, Regression analysis, Percentage analysis conducted using SPSS Software.

Ethical Consideration

Participation was voluntary, with informed consent obtained. Strict confidently and anonymity were maintained throughout the research process

Limitations

- The study relies heavily on self-reported questionnaire responses, which may be subject to **social desirability bias** Limited Generalizability

- The sample may not be fully representative of all small business owners, especially those in **informal sectors or rural areas** with limited internet access or digital infrastructure.

- The study employs a **cross-sectional survey**, capturing data at a single point in time.

- The study considers technological and some psychological variables, it may not adequately account for **contextual and institutional factors**

Correlation

		Online tax systems make it easier for me to comply with tax regulations	I feel more confident about the accuracy of my tax filings when using an online tax system
Online tax systems make it easier for me to	Pearson Correlation	1	.005
	Sig. (2-tailed)		.960

comply with tax regulations	N	113	113
I feel more confident	Pearson Correlation	.005	1
my tax filings when using	Sig. (2-tailed)	.960	
an online tax system	N	113	113

Interpretations

The Pearson correlation analysis between the statement "Online tax systems make it easier for me to comply with tax regulations" and "I feel more confident about the accuracy of my tax filings when using an online tax system" reveals a correlation coefficient of 0.005, which indicates an extremely weak and negligible positive relationship between the two variables. The p-value of 0.960 is far above the standard significance threshold of 0.05, meaning the relationship is not statistically significant. This suggests that, based on the responses from 113 participants, there is no meaningful linear association between perceiving ease of compliance and confidence in accuracy when using online tax systems.

Regression

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.964	1	19.964	5.446	.021[b]
	Residual	406.921	111	3.666		
	Total	426.885	112			

Dependent Variable: 1.Age
Predictors: (Constant), 23. I worry about potential cyber threats when filing taxes online

Coefficients

	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	4.451	.379		11.742	.000
	I worry about potential cyber threats when filing taxes online	-.299	.128	-.216	-2.334	.021

a. Dependent Variable: 1.Age

Interpretation

The regression analysis investigates the relationship between age (dependent variable) and the concern about cyber threats when filing taxes online (independent variable). The ANOVA results indicate that the overall model is statistically significant with an F-value of 5.446 and p-value of 0.021, which is below the 0.05 threshold. This suggests that the concern about cyber threats significantly predicts variation in age among respondents. The coefficient table further shows a negative and significant relationship (B = -0.299, p = 0.021), meaning that younger respondents are more likely to express concerns about cybersecurity when using online tax systems.

The standardized Beta value of -0.216 indicates a modest strength of this relationship. Overall, this finding highlights the importance of addressing cybersecurity fears—particularly among younger small business owners—to improve trust and adoption of online tax platforms

Findings

- The results indicate that **49.5%** of respondents (*16.8% Strongly Agree* and *32.7% Agree*) are concerned about cyber threats when using online tax systems. This reflects a significant trust issue that could hinder wider adoption.

- A combined **52.2%** of respondents (*23.9% Strongly Agree* and *28.3% Agree*) believe that online tax systems help authorities monitor compliance, indicating growing acceptance of technology in tax enforcement.

- The findings show that **56.6%** of respondents (*32.7% Agree* and *23.9% Strongly Agree*) supported the statement, while **26.5%** (*10.6% Disagree* and *15.9% Strongly Disagree*) opposed it, indicating a generally positive sentiment toward the variable.

- The results show that **43.4%** of respondents agreed with the statement, while **35.4%** disagreed and **21.2%** remained neutral, indicating mixed views with a slight positive lean.
- The **correlation coefficient (r = 0.005)** indicates a **negligible positive relationship**, and the **p-value (0.960)** confirms it is **not statistically significant**.
- **Regression analysis shows a significant relationship** between **age and concern about cyber threats** when using online tax systems.
- The **negative coefficient (B = -0.299, p = 0.021)** indicates that **younger respondents are more concerned** about cybersecurity issues.

Suggestion

- Address the significant trust issue by offering user education, transparent data handling policies, and visible security certifications.
- Capitalize on the growing acceptance of technology in tax enforcement by highlighting success stories and ease-of-use features.
- Encourage adoption by reinforcing positive user experiences, while actively resolving concerns from the 26.5% who showed opposition.
- Target communication efforts to shift neutral and negative views toward a more favorable perception through testimonials and user support.
- Given the negligible correlation, prioritize other influencing factors over general relationship trends when designing interventions.
- Tailor cybersecurity communication strategies based on age demographics, addressing specific fears and expectations of younger users.

Conclusion

The study reveals that while a significant number of small business owners recognize the benefits of online tax systems, particularly in enhancing compliance monitoring by authorities, concerns about cybersecurity remain a major barrier to adoption, with nearly 50% of respondents expressing distrust. Despite this, over half of the participants view technology as a useful tool in tax enforcement, indicating growing acceptance. However, the mixed opinions, with some respondents showing support and others skepticism, highlight the need for improved trust, security features, and user education. Age-related concerns about cyber threats also suggest that tailored strategies are required to address different demographic needs. Overall, the findings emphasize the importance of addressing security concerns and increasing awareness to facilitate the wider adoption of online tax systems.

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