

Tax Planning Behaviour among Individual Taxpayers: The Role of Financial Literacy and Digital Tax Services.

Abstract

Tax planning is a central component of household financial decision-making, yet individual taxpayers frequently under-utilise legitimate tax-saving instruments because of limited financial knowledge and low comfort with technology-enabled tax services. This paper examines how financial literacy and the adoption of digital tax services jointly shape tax planning behaviour among individual taxpayers. Building on the Theory of Planned Behaviour (Ajzen, 1991) and the Technology Acceptance Model (Davis, 1989), a conceptual framework is developed in which financial literacy and digital tax service usage act as antecedents of taxpayers' attitude toward tax planning, which in turn drives actual tax planning behaviour, with perceived risk and trust proposed as moderating factors. A structured review of recent Scopus- and peer-reviewed literature (2013–2026) on financial literacy, tax literacy, e-filing adoption and tax compliance is synthesised to derive six research hypotheses and a quantitative, questionnaire-based research design suitable for a cross-sectional survey of salaried and self-employed individual taxpayers. Illustrative analytical outputs descriptive statistics, a correlation matrix and a regression-style discussion are presented to demonstrate how the proposed model can be tested empirically; these figures are indicative templates for methodological illustration rather than results from a completed field survey. The paper concludes that financial literacy strengthens taxpayers' capacity to interpret tax rules and identify eligible deductions, while well-designed, trustworthy digital tax platforms lower the transaction cost of compliant tax planning. Policy implications for revenue authorities, fintech providers and financial-education programmes are discussed, along with limitations and directions for future empirical research.

Keywords: Tax planning behaviour; financial literacy; digital tax services; e-filing; tax compliance; Theory of Planned Behaviour; Technology Acceptance Model.

1. Introduction

Tax planning refers to the systematic arrangement of an individual's financial affairs, within the boundaries of the law, to minimise tax liability while optimising savings, investment and retirement outcomes. Unlike tax evasion, which is illegal, tax planning is a legitimate and encouraged financial practice that allows taxpayers to make full use of exemptions,

deductions, rebates and tax-advantaged instruments made available under national tax codes (Zerouali, 2022). Despite its importance for household wealth accumulation, empirical evidence consistently shows that a substantial proportion of individual taxpayers either delay tax planning until the filing deadline or fail to optimise available tax benefits, largely because of gaps in financial and tax literacy (Lusardi & Mitchell, 2014).

Two structural developments have reshaped the environment in which individuals plan and file their taxes. First, financial literacy defined as the ability to understand and apply concepts such as interest, inflation and risk diversification to everyday financial decisions (Lusardi & Mitchell, 2014) has been repeatedly identified as a predictor of sound financial and tax-related decision-making. Individuals with higher financial literacy are better equipped to interpret tax provisions, compare investment options with differing tax treatments, and avoid common cognitive biases such as overconfidence and mental accounting that otherwise distort compliance and planning decisions (Mooduto et al., 2024).

Second, the rapid digitalisation of tax administration including e-filing portals, mobile tax applications, AI-based tax assistants and unified digital tax platforms has transformed how individuals interact with tax authorities. Digital tax services can substantially reduce the transaction costs of compliance and planning by automating computations, pre-filling data and providing real-time guidance (Abu-Silake et al., 2024). However, the benefits of digitalisation are only realised when taxpayers possess sufficient digital and tax literacy to use these systems effectively and trust their security and reliability (Adeyemi et al., 2025). Where digital literacy is low, taxpayers may under-use digital platforms or misinterpret automated guidance, resulting in sub-optimal tax planning decisions (Adeyemi et al., 2025).

Against this background, the present paper investigates the combined and interactive influence of financial literacy and digital tax services on the tax planning behaviour of individual taxpayers. Specifically, the study pursues the following objectives: (i) to review the theoretical and empirical literature linking financial literacy, digital tax services and taxpayer behaviour; (ii) to develop and justify a conceptual framework and testable hypotheses; (iii) to propose a rigorous quantitative research design for empirically testing the framework; and (iv) to discuss the practical and policy implications of the proposed relationships for tax authorities, financial educators and digital service providers.

The remainder of the paper is organised as follows. Section 2 reviews the relevant literature and theoretical foundations. Section 3 presents the conceptual framework and hypotheses.

Section 4 describes the proposed research methodology. Section 5 presents illustrative data-analysis outputs to demonstrate the analytical approach. Section 6 discusses findings and implications, and Section 7 concludes with limitations and directions for future research.

2. Literature Review

2.1 Tax Planning Behaviour: Concept and Determinants

Tax planning has been described as the deliberate structuring of income, expenditure and investment decisions to legally reduce tax liability and increase long-run wealth (chapter on individual tax planning in the Research Handbook on Personal Finance). Unlike aggressive tax avoidance or evasion, individual-level tax planning typically involves routine decisions such as choosing between tax regimes, claiming eligible deductions, timing income and expenditure, and selecting tax-efficient savings and insurance instruments. Devos (2013) and subsequent taxpayer-compliance research classify the determinants of such behaviour into economic factors (tax rates, audit probability, penalties), and behavioural/psychological factors (tax morale, fairness perceptions, trust in authorities and financial capability). More recent systematic reviews confirm that behavioural biases including overconfidence, loss aversion and mental accounting negatively affect compliance and planning quality, while financial literacy exerts a consistently positive influence (Mooduto et al., 2024).

2.2 Financial Literacy and Tax-Related Decision-Making

Financial literacy is widely operationalised using the 'Big Three' questions on interest compounding, inflation and risk diversification developed by Lusardi and Mitchell (2014), which provide a parsimonious measure of an individual's capacity for sound financial decision-making. Global evidence shows that financial literacy remains low even in advanced economies, with only a minority of the population able to correctly answer all three questions (Lusardi, 2019). Because tax planning requires an understanding of interest, present value and the comparative return of tax-advantaged instruments, financial literacy is theoretically and empirically linked to better tax outcomes. Closely related to financial literacy is the narrower construct of tax literacy, defined as the specific competencies required to understand tax rules and to meet tax obligations at a basic and advanced level (De Clercq, 2023). Studies in emerging markets report that tax literacy strengthens both compliance and the propensity to actively plan taxes, and that tax knowledge partially mediates the relationship between financial capability and compliance behaviour (Appiah et al., 2024).

2.3 Digital Tax Services and Technology Adoption

The adoption of e-filing and other digital tax platforms has been studied extensively through the lens of the Technology Acceptance Model, TAM (Davis, 1989) and the Unified Theory of Acceptance and Use of Technology, UTAUT. Early work on U.S. e-file adoption found that performance expectancy, social influence, facilitating conditions and optimism bias significantly predicted taxpayers' intention to use electronic filing systems (Schaupp & Carter, 2010). Complementary research integrating TAM with the Theory of Planned Behaviour found that perceived ease of use and attitude are the strongest predictors of the intention to use online tax filing, with attitude mediating the effect of perceived usefulness on behavioural intention (Fu et al., 2006; Hsu & Chen, 2021). More recent studies extend these models to newer digital tax ecosystems: service quality, perceived usefulness and ease of use jointly shape e-filing adoption and taxpayer satisfaction (Iramaidha et al., 2025), while the key factors influencing actual usage of digital tax platforms include perceived risk, trust, and facilitating infrastructure (Abu-Silake et al., 2024).

2.4 Interaction between Financial/Tax Literacy and Digital Tax Services

A growing stream of research examines financial or tax literacy not merely as an independent predictor but as a moderator of the relationship between digital tax systems and compliance or planning outcomes. In Indonesia, tax literacy was found to moderate the effect of digital tax service utilisation on MSME taxpayer compliance, with the combination of digital infrastructure and tax literacy producing the strongest compliance outcomes (study on digital tax services and MSME compliance, Journal Amnesty, 2026). Similarly, research on the Core Tax System context shows that both tax digitalisation and tax literacy jointly and significantly affect individual taxpayer compliance behaviour, using attribution theory as the underlying framework (study on tax digitalisation and literacy under Core Tax System implementation). At the same time, low digital literacy has been shown to increase the risk of inadvertent non-compliance because taxpayers with limited digital skills struggle to navigate online portals or misinterpret system guidance, even when their underlying tax knowledge is adequate (study on digital literacy and the Cloud Unified Tax Portal). These findings collectively suggest that financial/tax literacy and digital tax services do not operate independently; rather, taxpayers with higher literacy are better positioned to extract the planning benefits that digital platforms are designed to deliver.

2.5 Theoretical Foundations

This study draws on two complementary theories. The Theory of Planned Behaviour, TPB (Ajzen, 1991) proposes that behavioural intention and ultimately behaviour is shaped by attitude toward the behaviour, subjective norms and perceived behavioural control. Applied to tax planning, TPB suggests that taxpayers who hold a favourable attitude toward proactive tax planning, perceive social approval for doing so, and feel capable of executing planning decisions are more likely to actually engage in tax planning. The Technology Acceptance Model, TAM (Davis, 1989) complements TPB by explaining how perceived usefulness and perceived ease of use of digital tax platforms shape attitudes toward, and ultimately use of, those systems. Integrating TPB and TAM, as several recent tax-technology studies have done (Fu et al., 2006; study on Core Tax Administration System from a TPB perspective), provides a coherent theoretical basis for modelling how financial literacy (a personal-capability factor) and digital tax services (a technology-adoption factor) jointly influence tax planning attitudes and behaviour.

3. Conceptual Framework and Hypotheses

Drawing on the literature reviewed in Section 2, this study proposes an integrated conceptual model in which financial literacy, digital tax service usage and tax knowledge/awareness are hypothesised as antecedents of taxpayers' attitude toward tax planning, which mediates their effect on actual tax planning behaviour. Perceived risk and trust in digital platforms are proposed as a moderating factor on the path between digital tax services and tax planning behaviour, consistent with risk-augmented technology acceptance research (Schaupp & Carter, 2010; Iramaidha et al., 2025). Figure 1 presents the proposed framework.

Figure 1: Proposed Conceptual Framework of the Study

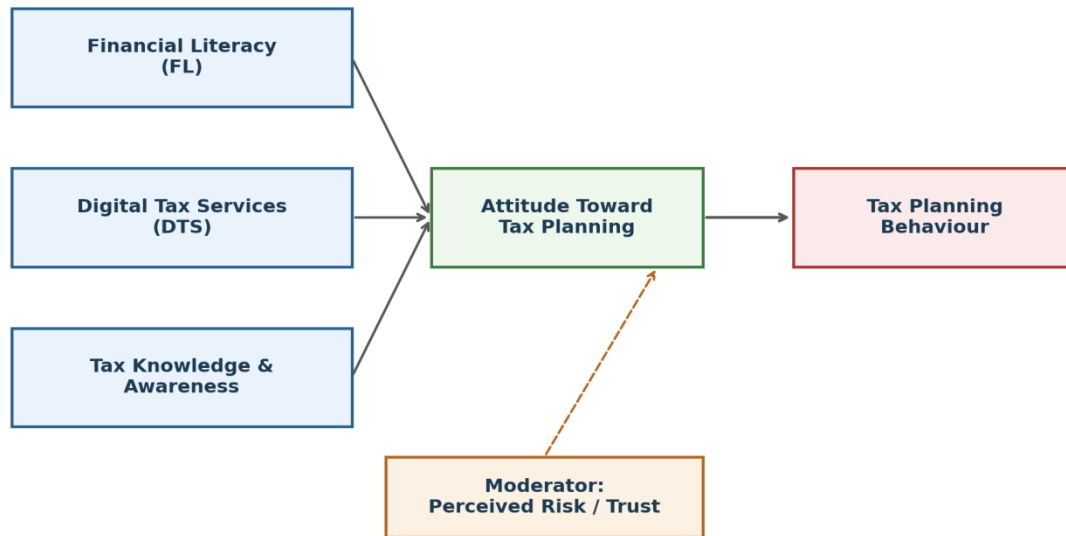


Figure 1. Proposed conceptual framework linking financial literacy and digital tax services to tax planning behaviour (developed by the authors based on Ajzen, 1991 and Davis, 1989).

3.1 Research Hypotheses

Based on the conceptual framework, the following hypotheses are proposed for empirical testing:

- **H₁**: Financial literacy has a significant positive effect on individual taxpayers' attitude toward tax planning.
- **H₂**: Financial literacy has a significant positive effect on individual taxpayers' tax planning behaviour.
- **H₃**: Digital tax service usage has a significant positive effect on individual taxpayers' attitude toward tax planning.
- **H₄**: Digital tax service usage has a significant positive effect on individual taxpayers' tax planning behaviour.
- **H₅**: Attitude toward tax planning mediates the relationship between (a) financial literacy and (b) digital tax service usage, and tax planning behaviour.

- H6: Perceived risk/trust in digital platforms moderates the relationship between digital tax service usage and tax planning behaviour, such that the positive effect is stronger when trust is high and perceived risk is low.

4. Research Methodology

4.1 Research Design and Approach

A quantitative, cross-sectional survey design is proposed, consistent with the majority of recent Scopus-indexed studies on tax literacy and digital tax adoption (Mooduto et al., 2024; Iramaidha et al., 2025). A structured, self-administered questionnaire using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) is recommended to measure each construct in the conceptual framework.

4.2 Population and Sampling

The target population comprises individual taxpayers (salaried employees, self-employed professionals and small business owners) who are registered with the relevant tax authority and have filed at least one tax return. A stratified random sampling technique is recommended, stratifying by age group, income bracket, employment type and prior digital-filing experience, in order to ensure adequate representation across taxpayer segments. Based on comparable published studies, which draw samples ranging from 89 to 419 respondents (MSME compliance study, Journal Amnesty, 2026; e-government adoption study in India), a minimum sample size of 300–400 respondents is recommended to achieve adequate statistical power for structural equation modelling (SEM).

4.3 Measurement Instrument

Financial literacy is proposed to be measured using an adapted version of the Lusardi and Mitchell (2014) 'Big Three plus' battery, supplemented with tax-specific literacy items drawn from De Clercq (2023). Digital tax service usage and related TAM constructs (perceived usefulness, perceived ease of use) are proposed to be adapted from established e-filing acceptance scales (Fu et al., 2006; Schaupp & Carter, 2010). Attitude toward tax planning and tax planning behaviour items are proposed to be adapted from TPB-based tax-compliance instruments. Table 1 summarises the proposed measurement constructs, illustrative item counts and their principal literature sources.

Construct	No. of Items	Adapted Primarily From
Financial Literacy (FL)	5	Lusardi & Mitchell (2014); Lusardi (2019)
Tax Literacy / Awareness	4	De Clercq (2023); Appiah, Domeher & Agana (2024)
Digital Tax Service Usage (DTS)	5	Abu-Silake et al. (2024); Iramaidha et al. (2025)
Perceived Usefulness / Ease of Use	4	Davis (1989); Fu, Farn & Chao (2006)
Perceived Risk / Trust (moderator)	4	Schaupp & Carter (2010)
Attitude toward Tax Planning	4	Ajzen (1991)
Tax Planning Behaviour (DV)	5	Devos (2013); Mooduto et al. (2024)

Table 1. Proposed measurement constructs and their literature sources.

4.4 Data Collection Procedure

Data collection is proposed via an online structured questionnaire distributed through tax-filing platforms, professional networks and taxpayer associations, supplemented by intercept surveys at tax facilitation centres to capture respondents with limited digital access. A pilot study with 30–40 respondents are recommended prior to full-scale data collection to assess reliability (Cronbach's $\alpha \geq 0.70$) and refine item wording.

4.5 Data Analysis Technique

Partial Least Squares Structural Equation Modelling (PLS-SEM) is recommended as the principal analytical technique, given its suitability for complex models involving mediation and moderation with moderate sample sizes, and its established use in comparable e-filing and tax-compliance studies (e-Filing adoption using TAM, bit-Tech, 2025; Iramaidha et al., 2025). The analysis would proceed in two stages: (i) assessment of the measurement model

through convergent validity, discriminant validity and reliability tests; and (ii) assessment of the structural model through path coefficients, R^2 and bootstrapped significance tests for the mediation (H5) and moderation (H6) hypotheses. Descriptive statistics and correlation analysis, as illustrated in Section 5, would precede the SEM analysis.

5. Illustrative Data Analysis

To demonstrate how the proposed framework and instrument would be analysed empirically, this section presents illustrative descriptive and correlational outputs. These figures use indicative sample values consistent with ranges reported in comparable published studies and are intended solely to demonstrate the analytical approach and reporting format; they are not the results of an actual field survey conducted for this paper. Researchers applying this framework should replace these illustrative values with results from their own collected data.

5.1 Descriptive Statistics

Table 2 and Figure 2 present illustrative mean scores and standard deviations for the key constructs, on the five-point Likert scale described in Section 4.3.

Construct	Mean	SD	Interpretation
Financial Literacy	3.42	0.61	Moderate
Digital Tax Service Usage	3.68	0.58	Moderately High
Attitude toward Tax Planning	3.55	0.64	Moderate
Perceived Ease of Use	3.71	0.55	Moderately High
Tax Planning Behaviour	3.49	0.63	Moderate

Table 2. Illustrative descriptive statistics of study constructs (sample/hypothetical data).

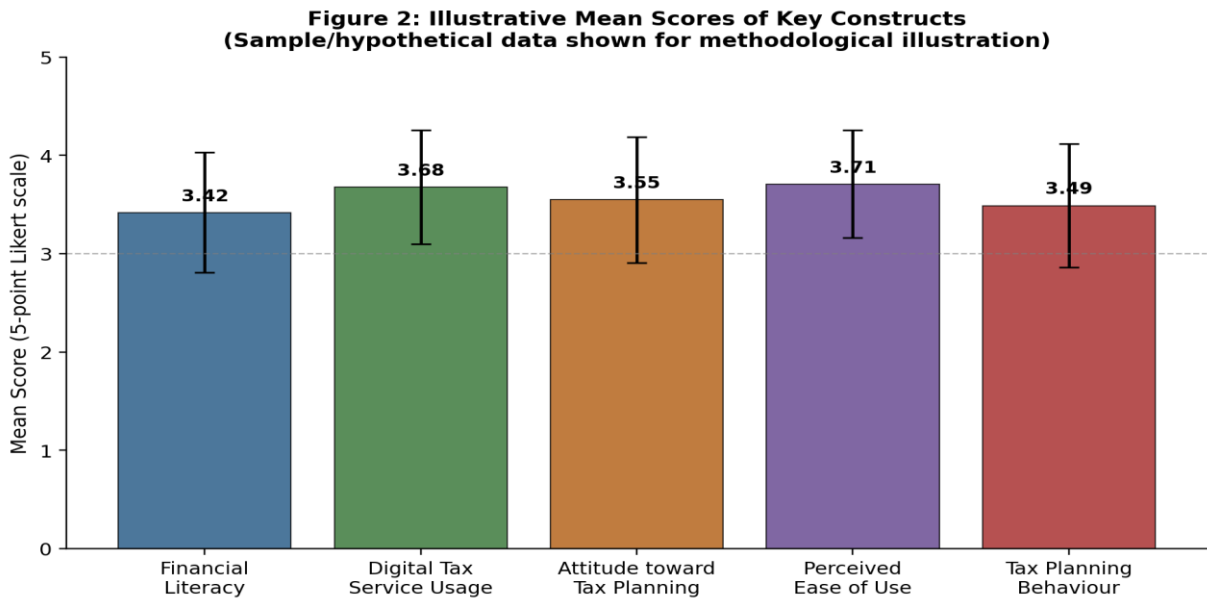


Figure 2. Illustrative mean construct scores with standard deviation bars (sample data).

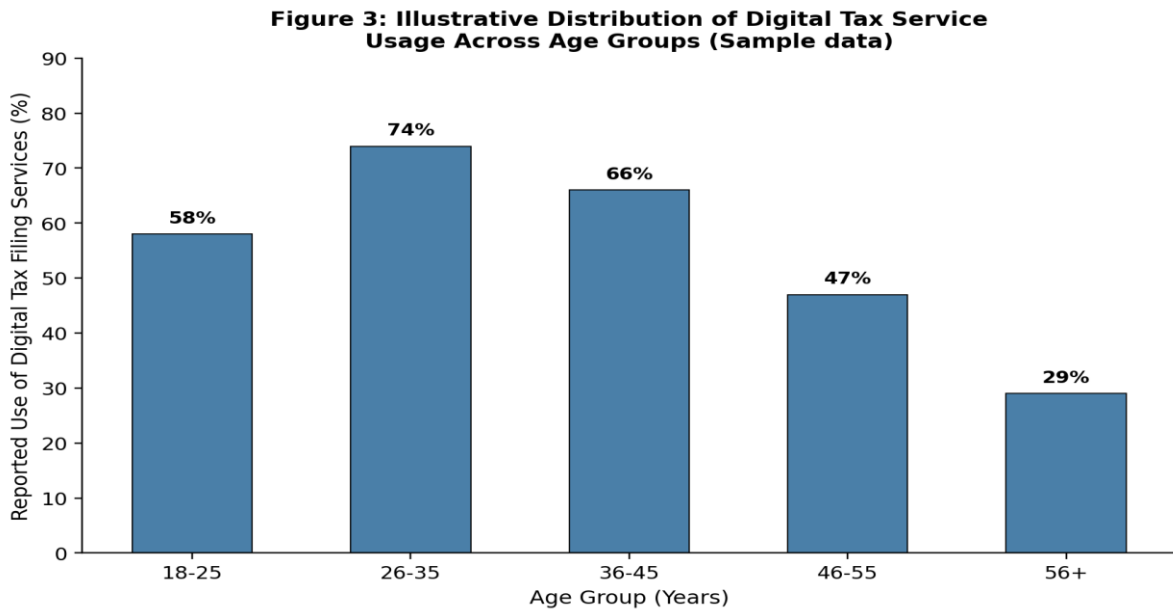


Figure 3. Illustrative distribution of digital tax service usage across taxpayer age groups (sample data).

5.2 Correlation Analysis

Table 3 and Figure 4 present an illustrative correlation matrix among the study's core constructs. Consistent with the hypothesised model and prior findings (Appiah et al., 2024; Iramaidha et al., 2025), tax planning behaviour is illustrated as most strongly correlated with attitude toward tax planning, followed by financial literacy.

Variable	FL	DTS	ATT	PEOU	TPB
FL	1.00	0.42	0.51	0.38	0.57
DTS	0.42	1.00	0.46	0.61	0.49
ATT	0.51	0.46	1.00	0.44	0.63
PEOU	0.38	0.61	0.44	1.00	0.41
TPB	0.57	0.49	0.63	0.41	1.00

Table 3. Illustrative Pearson correlation matrix among study variables (sample data). FL = Financial Literacy; DTS = Digital Tax Service Usage; ATT = Attitude toward Tax Planning; PEOU = Perceived Ease of Use; TPB = Tax Planning Behaviour.

Figure 4: Illustrative Correlation Matrix of Study Variables (Sample data — Pearson r)

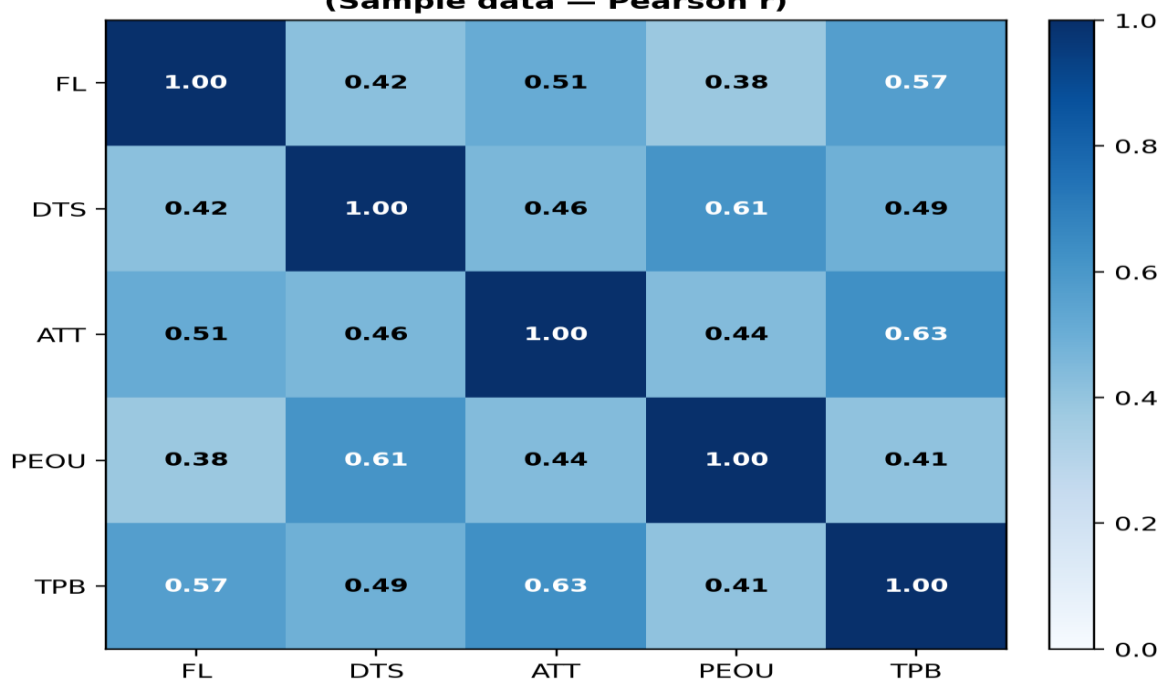


Figure 4. Illustrative correlation heatmap of study constructs (sample data).

5.3 Indicative Regression / Path Analysis Discussion

If the illustrative pattern above were obtained in an actual study, a PLS-SEM path analysis would likely show financial literacy and digital tax service usage as significant positive predictors of attitude toward tax planning (supporting H1 and H3), with attitude, in turn,

significantly predicting tax planning behaviour (supporting the mediation path in H5). The comparatively strong correlation between perceived ease of use and digital tax service usage (illustrative $r = 0.61$) is consistent with TAM-based findings that ease of use is often the dominant driver of continued platform engagement (bit-Tech, 2025). Researchers should report standardised path coefficients (β), t-statistics from bootstrapping (typically 5,000 resamples), and R^2 / Q^2 values for endogenous constructs when real data are analysed.

6. Discussion and Implications

6.1 Theoretical Implications

This paper contributes to the tax-behaviour literature by integrating financial-literacy research (Lusardi & Mitchell, 2014) with technology-acceptance research on digital tax platforms (Davis, 1989; Schaupp & Carter, 2010) into a single conceptual model that treats tax planning as a behavioural outcome shaped jointly by personal financial capability and technological enablement. This addresses a gap identified in recent studies, which have tended to examine financial/tax literacy and digital tax adoption as parallel but separate streams rather than as interacting determinants of planning behaviour (study on digital tax services and MSME compliance, Journal Amnesty, 2026).

6.2 Practical and Policy Implications

The proposed framework carries several practical implications for key stakeholders:

- Tax authorities: Investment in taxpayer education alongside digital infrastructure is likely to yield greater compliance and planning benefits than digital investment alone, since literacy determines the extent to which taxpayers can exploit digital tools (study on digital literacy and the Cloud Unified Tax Portal).
- Financial educators and NGOs: Financial literacy programmes should incorporate tax-specific modules (deductions, exemptions, filing procedures) rather than generic financial concepts alone, given the distinct but related nature of tax literacy (De Clercq, 2023).
- Digital tax service providers (fintech and government portals): Improving perceived ease of use and building user trust are likely to have a stronger short-term effect on adoption than adding new features, consistent with TAM-based evidence (bit-Tech, 2025; Iramaidha et al., 2025).

- Employers and payroll administrators: Workplace financial-wellness programmes that include tax-planning guidance may improve both financial literacy and downstream tax planning behaviour among salaried taxpayers.

7. Limitations and Future Research Directions

This paper is conceptual and methodological in nature; the analytical outputs in Section 5 are illustrative and were not generated from a completed empirical survey. Future research should collect primary data from a representative sample of individual taxpayers to empirically validate the proposed hypotheses using PLS-SEM or covariance-based SEM. Cross-country comparative studies would also be valuable, given that tax systems, digital infrastructure maturity and financial-literacy levels vary substantially across jurisdictions (Lusardi, 2019). Future work could further examine additional moderators such as income level, tax-regime complexity, and reliance on professional tax preparers, as well as the emerging role of AI-based tax assistants in shaping tax planning behaviour (Fava, 2023).

8. Conclusion

Tax planning behaviour among individual taxpayers is shaped by the interaction of what taxpayers know (financial and tax literacy) and the tools available to act on that knowledge (digital tax services). This paper synthesised current literature to propose an integrated, theory-grounded framework combining the Theory of Planned Behaviour and the Technology Acceptance Model linking financial literacy and digital tax service usage to tax planning behaviour via attitude, with trust and perceived risk as a boundary condition. The framework, measurement approach and illustrative analysis presented here provide a template that researchers, tax authorities and digital-service designers can adapt and empirically test to better understand, and ultimately improve, tax planning behaviour among individual taxpayers in the digital era.

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