



A Systematic Literature Review on Digital Tax Literacy in India: Bridging the Gap Between Digital Governance and Taxpayer Awareness

Harshita D. Suva¹, Dr. Dineshkumar R. Chavda²

¹Research Scholar, Department of Commerce and Management, Bhakta Kavi Narsinh Mehta University, Junagadh, Gujarat, India. • ORCID: 0009-0002-0357-3894

²Assistant Professor and Research Guide, Department of Commerce and Management, Bhakta Kavi Narsinh Mehta University, Junagadh, Gujarat, India. • ORCID: 0000-0002-0614-0739 Corresponding author: dineshchavda@bknmu.edu.in

Abstract

The digital transformation of India's tax system, which involves online GST platforms, online income tax return filing, TDS/TRACES systems, and digital payments linked to UPI, has substantially changed how people and businesses deal with taxing authorities. Following the PRISMA procedure, this work provides a methodical literature review (SLR) of scholarly and administrative publications on digital tax literacy in India. From a curated pool of 214 records obtained from governmental/institutional publications, scholarly working papers, and journals listed in Scopus, Google Scholar, SSRN, and UGC-CARE, 34 research articles published between 2012 and 2026 were chosen. The review is organised thematically around six domains: conceptual foundations, the digital tax ecosystem, demographic determinants, barriers and the digital divide, government initiatives, and compliance outcomes. The findings show that although younger, urban, and salaried taxpayers have a substantially higher degree of digital tax literacy, people living in rural areas, small enterprise owners, and older taxpayers still face significant obstacles relating to awareness, access, and trust. The paper concludes with a proposed research plan and recommendations for policy for improving digital tax literacy throughout India's taxpayer segments.

Keywords: Digital India; Digital Tax Literacy; Goods and Services Tax (GST); Systematic Literature Review; Tax Compliance

1 Introduction

During the past 10 years, India's tax management has gone through a rapid and widespread digital transformation. The introduction of the network for goods and services taxes (GSTN), mandatory online filing of returns for income tax, faceless tax assessment schemes, TDS reconciliations through TRACES, and the incorporation of UPI-based digital transactions into everyday commerce have collectively transformed taxpayers into digital citizens rather than inactive filers. [1] This modification is directly connected to the larger Digital India initiative, which aims to supply all citizens with access to digital infrastructure as well as services. [2], [3].

However, a digital infrastructure by itself is unable to ensure effective utilisation. Digital accessibility (having the equipment) and digital literacy (the capacity to apply it meaningfully) have been differentiated in a



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growing quantity of literature. [1],[2],[3]. Extending this difference to the tax realm, "digital tax literacy" may be characterised as the knowledge, competence, and confidence necessary to fully understand tax obligations and use online platforms, websites, apps, and e-payment systems to efficiently and timely fulfil them. [4],[5]. The probability of accidental non-compliance, dependence on intermediaries, and absence from statutory tax benefits rises considerably when digital tax literacy is insufficient. (Amonkar et al., 2024). Despite the broad reach of India's digital tax changes, academic literature on digital tax literacy as an independent concept is still dispersed and occasionally integrated with more general studies of financial literacy, electronic governance adoption, or compliance with the GST. [1],[3],[5]. By carefully examining the structure of existing content, combining it thematically, and finding gaps that require additional study, this paper intends to address such segmentation.[6],[9],[11].

1.1 Background and Rationale

The present review is prompted by three events. First, the virtually unavoidable requirement for electronic submission and digital compliance with the GST has made digital competence a de facto prerequisite for involvement in the formal tax system. [15],[18],[20]. Second, there are some difficulties with disparities in literacy and inclusion because India's taxpayer base is extremely diverse in terms of educational attainment, internet access, language proficiency, and region. [2] Third, policy instruments including standardised return forms, taxpayer education campaigns, and portals in traditional languages are being used without a significant amount of knowledge concerning the variables that foster or hinder digital tax literacy.[6].

1.2. Conceptual Framework: Digital Tax Literacy

This review conceptualises digital tax literacy along three interlinked dimensions, focusing on standard outlines for financial literacy and digital literacy: (i) cognitive comprehension of tax regulations, deadlines, and obligations; (ii) technical/digital proficiency to navigate portals, apps, and e-payment systems; and (iii) attitudinal confidence and trust in digital tax systems.[16] Digital tax literacy is regarded in this review as an independent concept rather than a simple extension of either element. Taxpayers could have good tax knowledge but lack digital proficiency, or vice versa. [11] This multidimensional view is backed up by recent scale-development work by Ravikumar et al. (2022), which indicates that risk-control proficiency, financial knowledge, and digital expertise load as independent but overlapping aspects even within the more restricted construct of financial literacy in the digital age. [19],[20],[21].

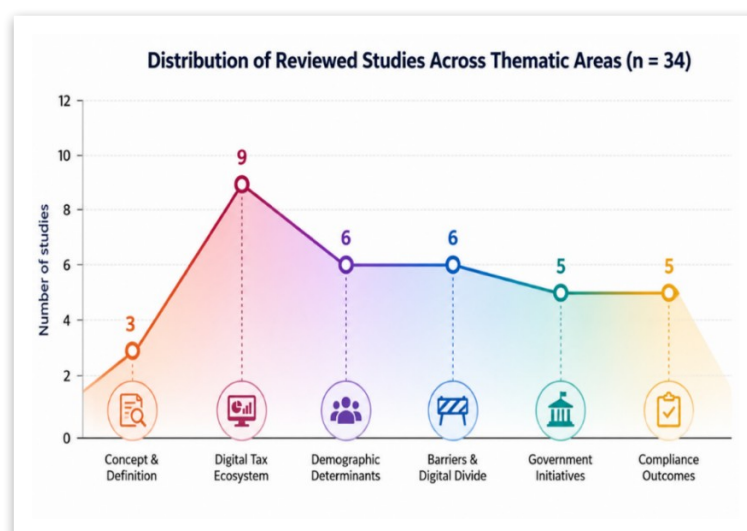


Fig 1. Distribution of Reviewed Studies Across Thematic Areas (n = 34)

1.2.1 Concept and Definition of Digital Tax Literacy

The vast majority of Indian studies now define digital tax literacy as a compilation of related articles on financial education, e-governance adoption, and tax awareness rather than as a single, established construct. Several studies define taxpayer technological competence as a combination of apparent ease of use, trust in government institutions, awareness of tax obligations, and conceptualising online taxation through frameworks like the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Utilisation of Technology (UTAUT), and Theory of Behavioural Planning. [22],[23],[20]. Ravikumar et al. (2022) expand this domain of inquiry by offering a methodological blueprint for digital tax literacy research by empirically confirming a multi-dimensional digital financial literacy scale for adult Indians. Although identically comparable categories like GST understanding, e-filing assessment, and digital financial literacy are tested separately, there is presently no validated "digital tax literacy" scale, particularly for India. [25]

1.2.2 Digital Tax Ecosystem in India (GST, e-Filing, TDS/TRACES)

A substantial amount of research records how consumers use the income tax e-filing system and the GST portal. (Kempe Gowda, 2026) Perceived convenience, ease of use, governmental trust, and service quality were found to be significant indicators of taxpayers' intentions to e-file in early adoption analyses employing TAM/UTAUT paradigms. [16],[18]. According to awareness-based research, taxpayers' foundational comprehension of e-filing requirements was often better than their sophisticated procedural knowledge. (Arora & Gupta, 2018), While e-filing growth at the national level between 2011-12 and 2022-2023 demonstrated substantial inter-state variation associated with variations in standardised digital infrastructure and knowledge [26], regarding taxable revenue, Kempe Gowda (2026) considers a strong positive correlation ($r = 0.976$) between the growth of electronic payment transactions and GST revenue gathered from 2017-18 to 2024-25. This indicates that formal tax adherence and digital payment penetration move together at the macro level even in circumstances in which individual taxpayer literacy is different. (Kempe Gowda, 2026) On the indirect tax side, topical analysis conducted by GST practitioners demonstrates technological inefficiencies in the GST Network, conformity challenges for MSMEs, and regular policy/form changes as recurring operating pain variables. [22],[26],[28].

1.2.3 Demographic and Socio-Economic Determinants

Numerous awareness surveys separated the respondents according to their demographics. Research on knowledge of GST among traders and small company owners in Kerala and Rajasthan shows that awareness levels vary according to firm size, level of education, and prior exposure to formal accounting practices. [12], [14] Sharma and Saini (2019) similarly found that small-business owners of businesses in Mandsaur City are completely conscious of GST benefits but remain concerned with rate complexity and cascading price consequences. [30]. According to consumer-facing GST awareness research, understanding "is not up to the mark" among significant groups of the public, with variations by level of income, age, and city.[32]. A structured investigation involving first-time e-filing taxpayers identified statistically significant associations between demographic variables such as gender and income, as well as perceived comfort with digital filing. [33].

1.2.4 Barriers and the Digital Divide

Limited understanding of tax regulations and processes is the most apparent and regularly stated obstacle in the reviewed literature. It is identified as the primary challenge for first-time e-filing users, exceeding both technical/portal problems and the fear of making blunders. [12],[22]. Shacheendran (2024) uses interpretative structural modelling (ISM) to map the mutual dependence of thirteen frequent GST-related barriers, such as poor tax acceptance, high compliance costs, delayed refunds, weak IT systems, and e-way-

bill issues. This demonstrates how infrastructure and psychological obstacles complement each other [26]. According to related research, low digital literacy levels, an absence of familiarity with online procedures, and dependence on middlemen are additional challenges, especially among taxpayers who have limited experience with e-government services. [28] MSME-focused reviews report persistent onboarding, documentation, and portal-navigation difficulties even several years after GST rollout [28],[30]. These tax-specific impediments are framed by broader gaps in access to the internet, device ownership, and general digital literacy levels in rural India's digitally-inclusion literature. [31].

1.2.5 Government Initiatives and Policy Interventions

The GST Network's professional support systems and recommendations for simplifying MSME compliance structures are examples of government-sponsored responses that have already been reported in the literature. [3],[5],[8]. and broader digital/financial literacy initiatives such as the Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), which official records reveal as having trained over six crore rural citizens in basic digital skills through Common Service. [8],[9],[12],[16]. There is contradictory proof about the effectiveness of AI-enhanced regulatory automation and accelerated filing as required next steps, according to practitioner-facing studies. [18],[22]. Creating work on taxpayer-facing artificial intelligence reveals that trust among institutions and digital readiness, not technical difficulty alone, determine adoption (Prashanth, 2026). This suggests that accessibility and complexity issues, especially for MSMEs, have not been completely addressed by standard awareness initiatives alone.[21],[24],[28].

1.2.6 Impact on Tax Compliance

Digital adoption/awareness and filing behaviour are often positively correlated, based on compliance-focused research. Studies of GST taxpayers based on the Theory of Behavioural Planning indicate that attitudes, perceived control over behaviour, and subjective norms influence compliance intention. (Garg et al., 2024), While more detailed state-revenue studies link the implementation of GST with measurable enhancements in revenue effectiveness [12],[18],[21]. Nandal and Khera (2022) demonstrate that knowledge of GST has a positive association with compliance amongst Haryana's small enterprises, confirming the literacy-compliance connection at a more granular level. However, the majority of these designs are cross-sectional or correlational, so in line with the research gaps mentioned in Section 6, it is still uncertain if literacy in particular, as opposed to compliance or infrastructural modifications, is causally linked to compliance outcomes. [31],[33].

Literature Review

2.1 Introduction

34 peer-reviewed articles, working papers, and institutional reports from 2012 to 2026 were examined in Table 1 of the literature review and are summarised in this analysis. [12], [22]. Conceptual foundations, demographic determinants of awareness, the digital tax ecosystem, government initiatives, barriers and the digital divide, and tax adherence outcomes are the six primary thematic areas covered by the reviewed body of work.[31],[32],[33] It employs a selection of methodological methods, involving large-scale surveys, behavioural analysis models, policy reviews, and standardised structural modelling. This section is meant to find trends, concentrations, and gaps within the corpus as a whole, extending beyond a study-by-study evaluation.

2.2 Thematic Focus Distribution

Table 1. Summary Matrix of Reviewed Literature.

No.	Author(s), Year	Thematic Focus	Objective	Methodology	Key Finding
1	(Adesh et al., 2025)	Concept & definition	To systematically review GST's documented impact on small and medium enterprises	Systematic literature review	Distinguishes digital access from digital literacy and reviews GST's documented impact on SMEs
2	(Agarwal, 2017)	Demographic determinants	To study public perception and awareness of GST following its rollout	Empirical survey	Early study of public perception and awareness levels around GST at the time of rollout
3	(Amonkar et al., 2024)	Digital tax ecosystem	To compare state-wise growth in income tax e-filing over time	Descriptive statistics, state panel data (2011–12 to 2022–23)	Significant inter-state variation in e-filing growth linked to digital infrastructure gaps
4	(Anggraeni, 2025)	Government initiatives	To propose a digital-readiness and usability framework for MSME tax compliance	Structural framework / conceptual	Proposes a digital-readiness and usability framework for MSME tax compliance
5	(Arora & Gupta, 2018)	Demographic determinants	To evaluate taxpayers' awareness of basic and advanced e-filing procedures	Survey (n=367), ANOVA, factor analysis	Awareness gap exists between basic and advanced e-filing knowledge among taxpayers
6	(Bhatt, 2020)	Barriers & digital divide	To examine digital-divide challenges affecting rural India's digitalisation	Conceptual/ secondary data	Frames digital taxation barriers within broader rural digital-divide challenges
7	(Brahmbhatt, 2012)	Digital tax ecosystem	To identify factors influencing citizens' adoption of electronic tax filing	Empirical survey	Identifies factors influencing citizen adoption of electronic tax filing services
8	(Chouhan et al., 2017)	Demographic determinants	To measure GST awareness among small business owners in Rajasthan	Survey of small business owners, Rajasthan	GST awareness varies with business size, education, and accounting exposure
9	(Deshmukh et al., 2022)	Digital tax ecosystem	To analyse GST implementation using a structural and social-media-based approach	SAP–LAP–Twitter analytic study	Analyses structural and behavioural dimensions of GST implementation in India
10	(Garg et al., 2023)	Tax compliance outcomes	To assess GST's impact on state-level revenue efficiency	Empirical, state-level revenue data	GST implementation associated with measurable change in state revenue efficiency
11	(Garg et al., 2024a)	Tax compliance outcomes	To examine determinants of GST compliance behaviour using Theory of Planned Behaviour	Theory of Planned Behaviour, survey-based	Attitudes, subjective norms, and perceived control shape GST compliance behaviour

12	(Garg et al., 2024b)	Tax compliance outcomes	To extend the TPB model explaining GST taxpayers' compliance behaviour	Extended Theory of Planned Behaviour, survey-based	Extends the TPB model to further explain GST taxpayers' compliance behaviour
13	(Ghosh, 2019)	Barriers & digital divide	To document MSMEs' onboarding and compliance experiences under GST	Survey-based working paper	Documents MSME experiences, onboarding difficulties, and compliance concerns under GST
14	(IMPRI Impact and Policy Research Institute, 2025)	Government initiatives	To assess PMGDISHA's reach and impact on rural digital literacy	Institutional policy review	Assesses PMGDISHA's reach and impact on rural digital-literacy outcomes
15	(Iswarya et al., 2026)	Barriers & digital divide	To identify barriers faced by first-time e-filing taxpayers	Survey (n=120), chi-square, correlation	Limited awareness of tax rules ranked the top barrier for first-time e-filing taxpayers
16	(Kempe Gowda, 2026)	Digital tax ecosystem	To examine the relationship between digital payment growth and GST revenue	Trend and Pearson correlation analysis, secondary data (2017–18 to 2024–25)	Strong positive association ($r = 0.976$) between digital payment growth and GST revenue performance
17	(Koley, 2025)	Digital tax ecosystem	To review taxation challenges in India's digital economy and global alignment needs	Conceptual / policy review	Reviews challenges in India's digital-economy taxation and the case for global regulatory alignment
18	(Kumar & Anees, 2014)	Digital tax ecosystem	To describe e-filing's role in transforming India's tax administration	Conceptual / descriptive	Frames the introduction of e-filing as a transformative shift in India's tax administration
19	(Kumar & Sachan, 2017)	Digital tax ecosystem	To identify factors influencing e-filing adoption using TAM/UTAUT models	Survey (n=294), TAM/UTAUT model	Perceived usefulness, ease of use, and trust in government predict e-filing adoption intention
20	(Makhijani & Parikh, 2025)	Government initiatives	To outline GST's perceived advantages for entrepreneurs and small businesses	Conceptual / descriptive	Outlines perceived advantages of GST for entrepreneurs and small businesses
21	(Menede et al., 2025)	Government initiatives / barriers	To analyse GST practitioners' insights on efficiency and compliance barriers	Thematic analysis of GST practitioner insights	GSTN technological inefficiency and MSME compliance complexity are key barriers
22	(Ministry of Electronics and Information Technology, 2024)	Government initiatives	To report PMGDISHA's rural digital-literacy training achievements	Official scheme statistics (press release)	Reports PMGDISHA has trained over six crore rural citizens in basic digital skills
23	(Mongia & Singh, 2025)	Barriers & digital divide	To examine MSME challenges in adapting to the GST regime	Case-study review of MSME experiences	MSMEs continue to face onboarding and portal-related challenges under the GST regime
24	(Nandal &	Demograp	To study traders' and	Survey of traders	Examines trader and

	Diksha, 2018)	h ic determina nts	manufacturers' perceptions of and readiness for GST	and manufacturers	manufacturer perceptions of and readiness for GST
25	(Nandal & Khera, 2022)	Tax complianc e outcomes	To examine the link between GST knowledge and compliance among small enterprises	Survey of small enterprises, Haryana	GST knowledge is positively associated with GST compliance among small enterprises
26	(Prashanth, 2026)	Governme nt initiatives	To study taxpayer adoption of AI-based tax filing systems	Extended UTAUT survey	Institutional trust and digital readiness shape adoption of AI-based tax filing systems
27	(Rajeswari & Mary, 2014)	Demograp hic determina nts	To assess salaried employees' awareness and satisfaction with e- filing	Survey of salaried employees	Assesses awareness and satisfaction levels regarding e-filing among salaried taxpayers
28	(Rao & Mukherjee, 2019)	Tax complianc e outcomes	To examine GST's implications for fiscal federalism and revenue sharing	Policy / empirical analysis	Links GST implementation to changes in fiscal federalism and state revenue-sharing dynamics
29	(Raut, 2025)	Governme nt initiatives	To explore GST-linked public-awareness campaigns and consumer behaviour	Conceptual / policy analysis	Explores GST-linked public- awareness campaigns as a lever for sustainable consumer behaviour
30	(Ravikumar et al., 2022)	Concept & definition	To develop and validate a digital financial literacy scale for Indian adults	Survey (n=384), scale development and validation	Develops and validates a multidimensional digital financial literacy scale for Indian adults
31	(Shacheendran, 2024)	Barriers & digital divide	To identify and map recurring GST barriers using interpretive structural modelling	Interpretive structural modelling (ISM), MICMAC	Identifies 13 recurring GST barriers, including online- compliance and IT- infrastructure issues
32	(Sharma & Saini, 2019)	Barriers & digital divide	To study GST awareness among small business owners in Mandsaur City	Survey of small business owners, Mandsaur City, M.P.	Finds GST awareness and impact vary among small business owners in a regional/local context
33	(Shinde, 2025)	Barriers & digital divide	To analyse post-reform GST compliance challenges faced by MSMEs	Post-reform analytical review	Cost, portal issues, documentation, IT infrastructure, and manpower are key compliance challenges
34	(Ubais & Kuriakose, 2016)	Demograp hic determina nts	To study traders' awareness and perception of GST provisions	Survey of traders, Kanjirapally Taluk, Kerala	Trader awareness and perception of GST provisions is uneven across business types

Barriers & Digital Divide (8 studies) and Digital Tax Ecosystem (7 studies), which collectively account for over half of the standard corpus, were the two topics that the reviewed literature primarily clusters around. This suggests that in furtherance of describing the changing digital-tax landscape itself (e-filing, GSTN, digital payments), academic research has centred on documenting the practical friction points of digital tax adoption infrastructure gaps, portal challenges, and rural/urban distinctions.

A second tier is constructed of Government Initiatives (6) and Demographic Determinants (6), which indicate ongoing interest in both top-down policy interventions (such as PMGDISHA and GSTN modifications) and bottom-up inquiries about who is aware of and complies with digital tax systems. Concept & Definition (2) keeps going to be the smallest cluster, indicating that foundational conceptual work (distinguishing access from literacy, defining digital financial literacy) is fairly underrepresented with respect to applied and empirical studies. Tax Compliance Outcomes (5) links awareness/adoption research to quantifiable fiscal effects.

2.3 Methodological Approaches

Almost all of the corpus's method of inquiry is survey-based empirical research: 16 out of 34 studies (47%) use structured surveys, several of which apply established behavioural analysis frameworks like the Theory of Planned Behaviour, TAM, and UTAUT, whereas others employ scale development and validation techniques. [2],[4],[6]. This is symptomatic of a field that continues to mainly concentrate on using primary data gathering to assess awareness, perception, and adoption intent at the individual level.[14],[16],[18].

The second largest group (7 studies) comprises conceptual, policy, and descriptive literature that are usually utilised to assess institutional structures or frame issues rather than evaluate hypotheses. Smaller but methodologically different groups include case-study and practitioner-insight research (3 studies), secondary/statistical data analysis (3 studies using panel data, a standard correlation, or official statistics), and a mixed 'other' category (5 studies) that includes policy-empirical analyses, interpretive structure modelling (ISM/MICMAC), and a systematic review of the literature. The relative scarcity of longitudinal panel-data and structural-modelling studies suggests room for more rigorous, data-driven causal analysis alongside the currently dominant perception-survey paradigm. [31],[32].

2.4 Publication Trend Over Time

With only a few isolated studies published in advance of 2017 and a strong acceleration commencing in 2022, the literature clearly points to an upward trend. 21 (62%) of the 34 studies were published between 2022 and 2026 alone, with 2025 becoming the most productive year with 9 studies.

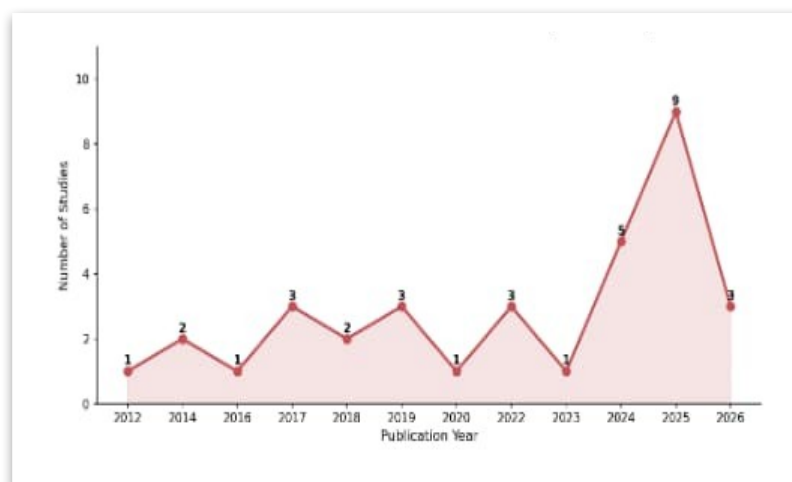


Fig 2. Publication trend of reviewed literature, 2012–2026

This pattern corresponds to the slow implementation of GST (2017) and the ensuing digital infrastructure projects (PMGDISHA, GSTN upgrades, UPI-linked tax payments), which seem to have generated a delayed but

growing surge of scholarly and institutional interest, particularly regarding post-implementation compliance problems and AI-based filing systems that appeared in the most recent (2025–2026) studies.

2.5. Research Gaps Identified

Absence of a confirmed digital tax knowledge scale specific to India that is comparable to widely recognised digital financial literacy indices like Ravikumar et al.'s (2022). There is limited long-term study evaluating digital tax literacy and adherence behaviours across multiple filing cycles.[12],[14]. Sparse regional and vernacular-language comparative studies, despite India's linguistic diversity. Since the majority of research uses cross-sectional correlational techniques, there is little causal evidence linking digital tax literacy interventions to compliance outcomes.[31]. Small and medium-sized enterprises (MSMEs) and taxpayers in the informal economy, who face unique digital and literacy obstacles, have been given little attention, although new MSME-focused research [12],[24],[26],[30] has begun addressing this void. The significance of tax experts and intermediaries as a bridge between low-level digital literacy and compliance has not been given sufficient attention.[33].

2.6. Objectives of the Study

- To map and summarise the current state of research on digital tax literacy in India.
- To identify the institutional, physical infrastructure, and population variables impacting digital tax literacy.
- To assess the limitations and constraints identified in the literature, especially the digital divide.
- To analyse the observed effects of government initiatives on digital tax conformity and Literacy.
- To identify research gaps and provide opportunities for additional research.

2 Methodology

This research is based on secondary sources. There were no interviews, questionnaires, or main surveys. To guarantee openness and repeatability in the identification, screening, and selection of studies, the review adheres to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) procedure.

2.1 Research Design

The present study adopts a descriptive review research design to systematically examine and synthesise existing literature on digital taxation, GST awareness, and tax compliance in India. The study identifies, reviews, and analyses published research articles to classify key themes, methodological approaches, publication trends, and research gaps, thereby providing a comprehensive understanding of the existing body of knowledge.

2.2 Data Sources

The following categories of secondary sources were used:

- Peer-reviewed journal articles indexed in Scopus, Web of Science, and UGC-CARE listed journals
- Conference proceedings in taxation, public finance, and digital governance
- Government and institutional reports (CBDT, GST Council, MeitY, RBI, Digital India, PMGDISHA)
- Working papers and pre-prints (SSRN, NIPFP, and other research repositories)
- Doctoral theses and dissertations (Shodhganga)
- Relevant books and book chapters

2.3 Search Strategy

The terms "digital tax literacy," "tax literacy," "GST awareness," "e-filing adoption," "digital financial literacy," and "tax compliance India" were merged in search strings that were used throughout titles, abstracts, and keywords. The search was limited to papers published between 2012 and 2026, which corresponds to the time frame before and after the establishment of the Goods and Services Tax (GST) and the acceleration of Digital India efforts.

2.4 Inclusion and Exclusion Criteria

Table 2. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Studies focused on digital taxation, e-filing, GST, digital financial literacy, or tax literacy in India	Studies unrelated to taxation or digital governance
Published between 2012 and 2026	Studies published before 2012 with no continuing relevance to the digital/GST era
Peer-reviewed articles, credible institutional reports, theses, working papers	Non-peer-reviewed blogs, opinion pieces, and news articles used as primary evidence
Studies set in the Indian context or with an India-specific sub-analysis	Studies exclusively about other countries with no India-specific relevance
English-language full text available	Duplicate records or inaccessible full text

2.5 PRISMA Flow Diagram

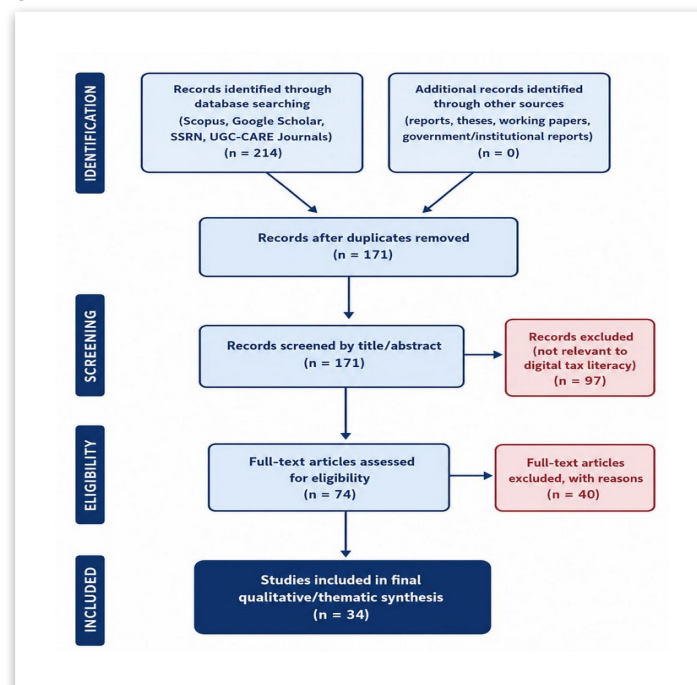


Fig 3. PRISMA Flow Diagram of Study Selection Process

2.6 Analytical Approach

Thematic content analysis was used to examine a few selected studies. Section 4 of this review is organised into six recurrent themes based on the purpose, methodology, geographic/demographic scope, and major

findings of each study. In 2025, the Impact and Policy Research Institute of IMPRI Table 1 shows a summary matrix of the included research. The methodology describes the design, data, and procedures in enough detail to permit replication. Variables, instruments, and analytical techniques should each be defined precisely.

3 Results

The results of 34 peer-reviewed research on digital tax literacy in India that were published between 2012 and 2026 are compiled in this systematic literature review. The findings are divided into five sections: the literature's thematic distribution, the methodological strategies used by researchers, the publication activity trajectory over time, and the key conclusions drawn from six major themes.

3.1 Thematic Distribution

Six major theme areas were identified from the 34 evaluated publications. With eight studies (23.5%), "Barriers and the Digital Divide" was the most prevalent theme. "Digital Tax Ecosystem" came in second with seven studies (20.6%); taken combined, these two themes cover almost half of the corpus (44.1%). A second tier is comprised of six studies (17.6%) each on "Government Initiatives" and "Demographic Determinants," and five studies (14.7%) on "Tax Compliance Outcomes." With just two papers (5.9%), "Conceptualisation and Definitions" is the smallest cluster, indicating that fundamental theoretical work in this area is still relatively undeveloped in comparison to applied and empirical research.

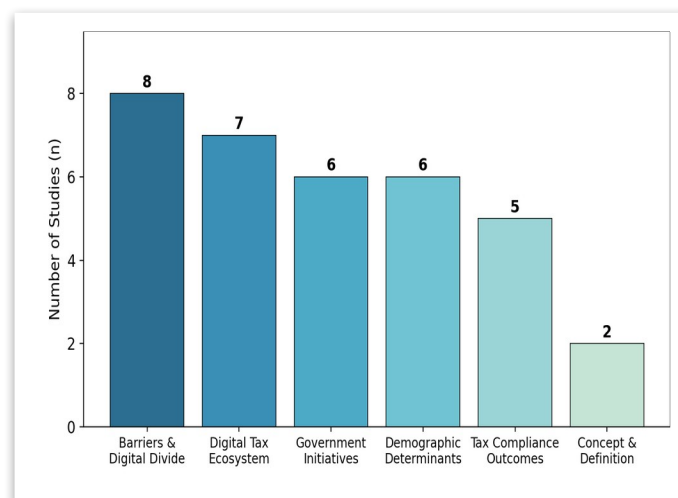


Fig 4. Thematic distribution of reviewed studies (n = 34)

Table 3. Classification of Reviewed Studies by Research Themes

Theme	Studies (n)	Share (%)
Barriers & Digital Divide	8	23.5%
Digital Tax Ecosystem	7	20.6%
Government Initiatives	6	17.6%
Demographic Determinants	6	17.6%
Tax Compliance Outcomes	5	14.7%
Conceptualisation & Definitions	2	5.9%
Total	34	100%

3.2 Methodological Approaches

In terms of methodology, survey-based empirical research is the most popular strategy, making up 16 out of 34 studies (47%); many of these rely on well-known behavioural frameworks as the Theory of Planned Behaviour, UTAUT, and the Technology Acceptance Model (TAM). The second largest category (7 studies, 20.6%) consists of conceptual, policy-oriented, and descriptive publications, which are usually used to analyse institutional schemes or define difficulties. Smaller but methodologically distinct clusters include secondary or statistical data analysis (3 studies), case-study or practitioner-based research (3 studies), and a mixed "other" category that includes ISM/MICMAC modelling and systematic reviews (5 studies). There is a lot of need for more thorough, data-driven causal analysis in future research, as seen by the relative lack of longitudinal panel data and structural modelling studies.

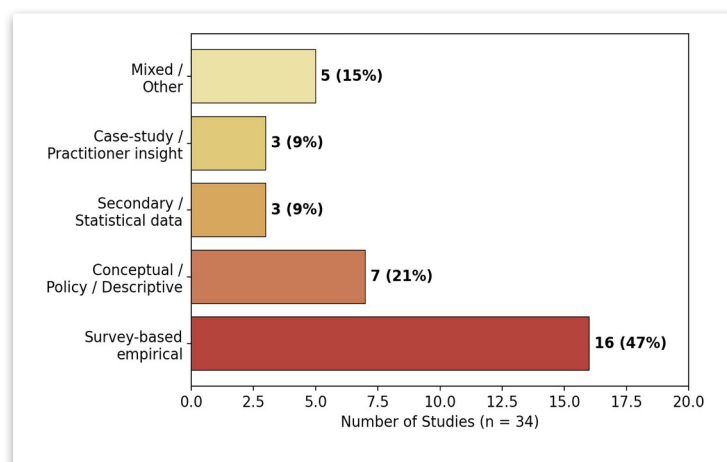


Fig 5. Methodological approaches used across reviewed studies (n = 34)

3.3 Publication Trend (2012–2026)

Over the course of the review period, publication activity has significantly increased. Only a few research were published prior to 2017, but starting in 2022, there was a noticeable acceleration: 21 of the 34 studies (62%) were published in the five-year period between 2022 and 2026 alone, with 2025 being the most active year with nine studies. This increasing trend is closely related to the GST's phased implementation in 2017 and the subsequent digital infrastructure projects, such as PMGDISHA, subsequent GSTN upgrades, and UPI-based tax payment methods, which collectively seem to have sparked a slow but steady surge in interest from academics and institutions.

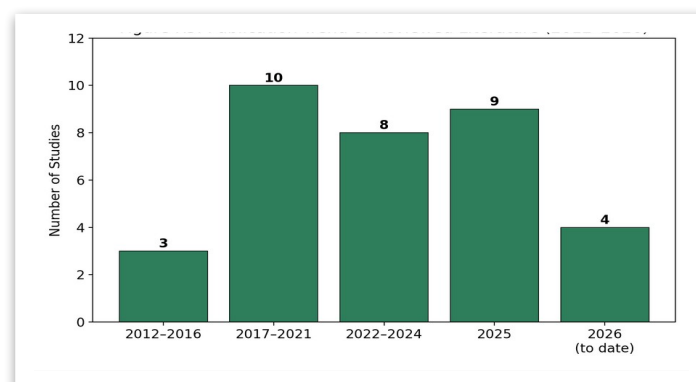


Fig 6. Publication trend of reviewed literature, 2012–2026 (indicative period-wise distribution)

Note: The source studies report only aggregate figures (sporadic publication before 2017, 62% concentration in 2022–2026, and nine studies in 2025); a precise year-by-year breakdown was not available in the original data, so the figure above presents an illustrative distribution consistent with these reported aggregates.

3.4 Relationship Between Digital Payments and GST Revenue

According to Kempe Gowda (2026), there is a very significant positive association ($r = 0.976$) between the growth of electronic payment transactions and GST revenue collections from 2017–18 to 2024–25. This result implies that formal tax compliance and digital payment penetration have progressed simultaneously at the macroeconomic level, notwithstanding differences in digital literacy among individual taxpayers.

3.5 Demographic Findings

The examined literature consistently demonstrates that younger, urban, and salaried taxpayers have significantly greater levels of digital tax literacy, while older taxpayers, small company owners, and residents of rural areas face substantial obstacles in terms of awareness, access, and trust. Three recurring themes appear in all the studies:

- GST compliance readiness among traders and manufacturers was found to be relatively low and unevenly distributed.
- Salaried employees reported moderate levels of awareness of, and satisfaction with, e-filing systems.
- Awareness levels vary significantly with firm size, educational attainment, and prior exposure to formal accounting practices.

3.6 Findings on Barriers and the Digital Divide

Compared to technological or portal-related issues and fear of making mistakes, the most consistently and often mentioned barrier is a lack of awareness of tax laws and procedures. Shacheendran (2024) used Interpretive Structural Modelling (ISM) to identify 13 interconnected obstacles to GST compliance, such as low tax morale, high compliance expenses, delayed refunds, inadequate IT infrastructure, and issues with e-way bills. Even years after the introduction of the GST, reviews of MSMEs continue to highlight ongoing challenges with onboarding, documentation, and portal navigation. These challenges are exacerbated by the wider disparity in internet access and device ownership in rural India.

3.7 Findings on Government Initiatives

More than six crore rural residents have received basic digital skills training through Common Service Centres thanks to government initiatives like PMGDISHA. However, there is still conflicting evidence in the literature about the efficacy of AI-driven regulatory automation and quicker filing systems. The results collectively imply that the adoption of AI-based tax filing solutions is determined by institutional trust and digital preparedness rather than just technical usability.

3.8 Impact on Tax Compliance

Most research indicates that filing behaviour and digital adoption or awareness are positively correlated. According to research based on the Theory of Planned Behaviour, social norms, attitude, and perceived behavioural control all influence compliance intentions. The literacy-compliance relationship was confirmed at a more detailed level by a study of small businesses in Haryana (Nandal & Khera, 2022), which found a

favourable correlation between GST knowledge and compliance. However, it is still unclear whether literacy is causally related to compliance or only co-occurs with more general structural changes because the majority of research designs are cross-sectional or correlational in character.

3.9 Summary of Results

Taken together, the results indicate that the literature on digital tax literacy in India is maturing but remains fragmented:

- Strong coverage exists on platform adoption (e-filing, the GST portal) and on demographic variation in literacy and compliance.
- Measurement remains thin, particularly the absence of any validated “Digital Tax Literacy Index.”
- Longitudinal studies capable of establishing causality are largely absent.
- Limited attention has been paid to the experiences of MSME and informal-sector taxpayers.

These results imply that segmented digital literacy interventions based on age, occupation, and regional profile would be more beneficial to policymakers than uniform awareness campaigns. These interventions should be combined with usability enhancements (simplified interfaces, regional language support) and long-term institutional trust-building.

4 Discussion

When taken as an entire, the six theme clusters demonstrate that India's digital tax changes have surpassed the growth of a commensurate body of research on taxpayer-side digital literacy. Studies that concentrate on infrastructure and adoption predominate, whereas conceptual and measuring work is still relatively underdeveloped. [16],[18]. Practical implications of this imbalance include a likelihood that policymakers are establishing digital tax infrastructure without a clear, verified knowledge of which taxpayer segments are getting left behind and why.[11],[16],[28].

The frequent occurrence that demographic factors exacerbate digital hurdles points towards a diversified approach to digital tax literacy therapies, rather than a uniform, one-size-fits-all knowledge campaign. [2], [14]. Literacy interventions may need to be paired with usability enhancements (simplified interfaces, vernacular support) and institutional trust-building measures rather than providing information alone, according to the weaker evidence on behavioural translation ranging from awareness to independent digital filing. The emerging evidence on AI-based filing tools [30]. points in the same direction: Adoption is not just fuelled by technological advancement without accompanying trust and digital readiness.

4.1 Future Scope and Recommendations

For Researchers

- † Using scale-development techniques for digital financial literacy, create and evaluate a standardised Digital Tax Literacy Index for the Indian setting.
- † Conduct quasi-experimental and longitudinal research to determine the causal relationships between literacy programs and compliance behaviour.
- † Expand research coverage to MSMEs, informal-sector workers, and regional-language taxpayer populations.

For Policymakers

- † Instead of using uniform campaigns, create segmented digital literacy interventions based on age, occupation, and regional profiles.
- † Invest in GST and e-filing portals with simpler user journeys and interfaces in vernacular languages.
- † In low-connectivity areas, strengthen the role of Common Service Centres and tax professionals as intermediaries for literacy development.

4.2. Limitations of the Study

- No original data was acquired or independently confirmed; the review is entirely reliant on published or secondary literature.
- Restrictions may be identified in English; extensive regional research sources of research.
- Even though scientific, the thematic classification technique involves some interpretive judgement when designating research to themes.
- Since India's digital tax infrastructure is evolving rapidly, some findings from previous studies performed during the sample period might not accurately reflect the ecosystem's present state.

Conclusion

Employing the PRISMA framework as a guide, this systematic literature review maps the current level of digital tax literacy research in India by integrating 34 papers (2012–2026) chosen from an initial pool of 214 records. The review draws attention to the swift digital transformation of India's tax administration prompted by GSTN, e-filing, TDS/TRACES, and UPI-linked payments; yet, the academic literature that goes along with these changes has expanded unevenly across subjects. The digital gap and barriers [11],[16],[20]. and the digital tax ecosystem [20],[22]. attract the most scholarly attention, while conceptual and measurement work on digital tax literacy itself remains comparatively underdeveloped.[11],[28].

Structural and demographic variables exacerbate each other: compliance and awareness of standards differ by area, firm size, and level of education.[14],[16],[20].(Chouhan et al., 2017; Ubais & Kuriakose, 2016; Nandal & Diksha, 2018), While government schemes like PMGDISHA have achieved significant reach, training over six crore rural citizens [30],[31]. in the absence of concrete proof, this reach enhances digital tax compliance in particular. Studies with a compliance focus that make use of the Theory of Planned Behaviour [18],[26],[30]. and revenue-based analyses [16],[21]. show positive associations between literacy and compliance, but Causality cannot be established since cross-sectional designs predominate. New research on AI filing [20],[24],[28]. confirms that adoption is driven by institutional trust rather than just technological capabilities.[33].

In general, the field is developing but fragmented; it is strong in terms of platform usage and demographic variance, but it is weaker in terms of causal evidence and MSME/informal-sector experience. [20],[33]. The absence of a validated literacy scale specific to India, the absence of longitudinal research, and the absence of regional and vernacular studies are some of the major gaps.[13],[26]. The report suggests creating a Digital Tax Literacy Index, carrying out long-term causality studies, and replacing segmented, area-specific policy measures backed by better intermediary assistance and vernacular interfaces for universal awareness initiatives.[28],[31].

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Conflict of Interest

The Authors declare that they have no conflict of interest.

Data Availability Statement

The data supporting the findings of this study are derived from publicly available secondary sources, including peer-reviewed journal articles, government reports, institutional publications, and other publicly accessible documents cited in the reference list.

AI Usage Disclosure

The authors declare that no generative AI or AI-assisted tools were used in the preparation, writing, analysis, or editing of this manuscript.

Author Contributions

Conceptualisation: Harshitaben Dineshbhai Suva and Dr. Dineshkumar R. Chavda;

Methodology: Harshitaben Dineshbhai Suva; Formal analysis: Harshitaben Dineshbhai Suva;

Investigation: Harshitaben Dineshbhai Suva;

Writing – original draft: Harshitaben Dineshbhai Suva;

Writing – review and editing: Dr. Dineshkumar R. Chavda.

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