GST COMPLIANCE IN THE DIGITAL ERA AND IMPACT OF GST 2.0: OPPORTUNITY AND CHALLENGES

Abstract

The introduction of the Goods and Services Tax (GST) in India marked a major transformation in indirect tax administration by integrating multiple taxes into a unified, technology-driven system. This paper examines the evolution of GST compliance in the digital era and analyses the impact of GST 2.0 on taxpayers and tax authorities. The article highlights how digital tools such as the GST Network (GSTN), e-way bills, e-invoicing, artificial intelligence, and data analytics have improved transparency, revenue collection, supply-chain monitoring, and formalisation of the economy. At the same time, the paper discusses challenges including technological dependence, compliance burden on small businesses, cybersecurity concerns, and increased litigation arising from procedural complexities. GST 2.0 has further strengthened automated compliance and anti-evasion mechanisms through real-time invoice validation and predictive monitoring systems. The article concludes that while digitalisation has enhanced efficiency and accountability in tax administration, long-term success depends on balancing strict compliance enforcement with taxpayer convenience and procedural simplification.

CMA Kalyanasundari R
Deputy Director (Cost)
Indian Cost Accounts Service
Madurai
Kalyanasundari1993@gmail.com

Introduction

The implementation of the Goods and Services Tax (GST) in India on 1 July 2017 is one of the most significant fiscal reforms in the country's economic history. By subsuming multiple indirect taxes such as excise duty, service tax, value added tax (VAT), entry tax, and several state-level levies into a unified tax structure, GST brought in the principle of "One Nation, One Tax." Beyond tax harmonisation, another significant change brought in by the GST is establishment of a technology-driven compliance framework in India. It has been nine years since the introduction and the tax system has evolved into a highly digitalised ecosystem supported by online return filing, e-way bills, e-invoicing, analytics, artificial intelligence, and automated scrutiny mechanisms. The newer phase of reforms, often described as GST 2.0, has further deepened this transformation by emphasising real-time compliance, stronger anti-evasion systems, and enhanced digital integration.

GSTN –a National Information Utility

Establishment of the Goods and Services Tax Network (GSTN), a common digital platform for registration, return filing, tax payment, refund claims, and compliance management is one of the key building block in the GST framework. Prior to GST, businesses had to deal separately with different authorities for excise duty, service tax, and VAT, each having distinct procedures and filing requirements. GST replaced these fragmented systems with a standardised online mechanism. The digital filing system reduced physical interaction between taxpayers and tax officials and brought greater transparency into the compliance process. The online platform also created a comprehensive digital trail of transactions, making concealment of turnover or manipulation of records considerably more difficult.

GSTN is one of the world's largest digital tax administration systems now. According to the GST Network (GSTN), the system has processed billions of invoices, returns, and e-way bills since implementation. The scale of digital participation itself reflects the degree to which taxation in India has become technology dependent. GST compliance in the digital era therefore needs to be analysed not merely as a tax reform but as a broader shift toward digital governance, automated administration, and data-driven regulation.

Monitoring movement through E-Way bill

Another major compliance reform under GST has been the introduction of the e-way bill system. Under this mechanism, movement of goods beyond a prescribed value threshold requires electronic documentation prior to transportation and is governed by Section 68 and Rule 138 of CGST Act, 2017. The e-way bill system transformed the monitoring of supply chains by enabling real-time tracking of goods movement across states. This has significantly reduced the scope for tax evasion through unaccounted transportation of goods. The system has also eliminated many interstate check posts that existed under the previous tax regime, thereby improving logistics efficiency and reducing transit delays. However, the growing dependence on digital systems has also made logistics operations prone to technical failures, portal downtimes and connectivity issues which may affect the core business operations. It is important to strengthen the IT infrastructure to avoid such mishaps so that compliance does not bring heavy costs to the business.

E-invoice ensuring seamless exchange of information

E-invoicing has emerged as another important pillar of GST compliance. Rule 48(4) of CGST Rules 2017 mandates e invoicing as well as stringent penalties for non compliance. This is being introduced in a phased manner as of now. Under this system, invoices are authenticated electronically through the Invoice Registration Portal before they are used for tax reporting. The introduction of e-invoicing has strengthened invoice matching and improved the accuracy of Input Tax Credit (ITC) claims. Since invoice data flows automatically into returns, reconciliation has become faster and more reliable. The expansion of e-invoicing under GST 2.0 to cover smaller businesses has further widened the compliance net. Automated invoice validation has reduced the possibility of fake invoicing and strengthened audit trails for the tax department.

Ensuring compliance with the help of Data Analytics and AI

With the help of artificial intelligence and data analytics, GST compliance mechanism has been transformed considerably. Tax authorities now rely on algorithm-based scrutiny to identify suspicious transactions, mismatches in returns, irregular ITC claims, and potential tax evasion. Data from GST returns, e-way bills, banking systems, and income tax records are increasingly integrated for compliance monitoring. This has enabled authorities to implement risk based assessment model of taxpayers based on their risk profile. This represents a major structural shift in tax administration where technology rather than physical verification has become the primary instrument of compliance monitoring.

From the perspective of the government and tax administration, the digitalisation of GST compliance has produced several positive outcomes. One of the most visible achievements has been improved revenue collection efficiency. The creation of digital transaction trails has made under-reporting of sales and fake ITC claims more difficult. Automated matching systems and analytics have strengthened the ability of authorities to identify irregularities quickly. As a result, GST collections have shown consistent growth over the years, supported not only by economic expansion but also by better compliance enforcement.

The digital GST ecosystem has also created a vast database of economic transactions. This data enables authorities to monitor sectoral trends, identify high-risk taxpayers and conduct targeted audit and investigations. Such data-driven administration was largely absent in the pre-GST regime. The integration of GST systems with customs databases, income tax information, and banking networks has substantially enhanced enforcement capacity. In many ways, GST has transformed taxation into a continuous real-time monitoring mechanism rather than a periodic assessment exercise.

Faceless tax administration and formalisation of economy

Faceless tax administration is one of the major benefits of the digitalisation era. Online registration, e-filing and automated refund processing have reduced the discretionary powers of officials. Standardised digital procedures have improved transparency and created greater uniformity in tax administration across states.

GST has also contributed significantly to the formalisation of the Indian economy. Since businesses can claim ITC only when purchases are made from registered suppliers, firms increasingly prefer dealing within the formal system. This has encouraged proper bookkeeping, banking transactions, digital invoicing, and tax registration among businesses that previously operated informally. The formalisation effect has broader economic implications, including better access to institutional finance and greater financial transparency.

For taxpayers, the digital eco system has resulted in several benefits. First of all, compliance has become easier because of reduced number of laws. Also, taxpayers now operate under single pattern of registration and return filing across states reducing chances of non compliance because of lack of knowledge. Interstate trade has become more viable due to the reduction of physical checkpoints. This has improved supply-chain efficiency and reduced transportation delays.

Digitalisation has also improved refund processing, particularly for exporters. Automated systems have accelerated the processing of ITC refunds and export-related claims, reducing working capital blockages. Integration of GST compliance with accounting software and enterprise resource planning systems has further simplified return preparation and invoice reconciliation for many businesses.

Cost of Digital Infrastructure

Despite these achievements, GST compliance in the digital era has also created substantial challenges. From the perspective of the tax department, one of the major concerns is the heavy dependence on technological infrastructure. The functioning of the entire compliance ecosystem depends on uninterrupted digital connectivity and portal efficiency. Technical glitches, server downtimes, OTP failures, and system slowdowns continue to affect taxpayers periodically. Since millions of transactions are processed simultaneously, maintaining system stability remains a major administrative challenge (Shacheendran, 2024).

While digital systems have reduced traditional forms of tax evasion, they have also given rise to more sophisticated forms of fraud. Fake invoicing networks, circular trading arrangements, and shell companies continue to exploit loopholes within the system. Fraudsters increasingly use technology itself to manipulate digital compliance mechanisms. This highlights the need to strengthen surveillance systems and adopt advanced analytical tools for fraud detection.

From the perspective of taxpayers, particularly small and medium enterprises, GST compliance remains demanding. Businesses are required to undertake e-return filing, e-invoice reconciliation, e-way bill generation etc. Smaller firms often struggle to cope with such technological requirements (Singh & Singh, 2024). The cost of compliance has increased due to the need for updating accounting software, ERP systems, and staff training.

Digital dependence has also created difficulties for businesses operating in areas with poor internet connectivity or limited digital literacy. Traditional traders who were accustomed to manual systems often find technology-driven compliance burdensome (Basavanagouda & Panduranga, 2022). The highly automated nature of GST also increases anxiety among taxpayers because even minor procedural errors may attract penalties, notices, or restrictions on ITC claims.

Evolving Act

Frequent amendments and procedural changes have also contributed to increased litigation under GST. Issues relating to ITC eligibility, mismatches in returns, delayed filing, and technical errors often lead to disputes between taxpayers and authorities. The evolving nature of GST regulations has created interpretational uncertainty in several areas, resulting in a substantial volume of litigation before courts and tribunals (Basavanagouda & Panduranga, 2022).

Conclusion

The emergence of GST 2.0 has intensified both the opportunities and challenges associated with digital compliance. GST 2.0 represents a more advanced phase of reform focused on tighter digital integration, AI-based scrutiny, automated return population, enhanced cybersecurity, and stricter invoice validation systems. Features such as the Invoice Management System (IMS) allow recipients to verify or reject invoices before ITC claims are finalised. Automated population of returns reduces manual intervention but simultaneously increases the importance of accurate real-time reporting.

Security measures such as multi-factor authentication and tighter timelines for invoice uploads indicate that GST administration is increasingly moving toward predictive and preventive compliance rather than post-facto assessment. The objective is to create a system where irregularities are identified instantly through automated cross-verification. While such measures improve transparency and reduce tax leakage, they also increase compliance pressure on businesses, especially smaller enterprises with limited technological capacity.

Overall, GST compliance in the digital era reflects a broader transformation in the relationship between the state, taxpayers, and technology. The reform has significantly improved transparency, expanded the tax base, strengthened enforcement and accelerated the formalisation of the economy. GST 2.0 has further reinforced these trends by deepening automation and real-time monitoring mechanisms (Gupta, Bhavyashree & Tambad, 2025). At the same time, the system continues to face important challenges relating to technological dependence, compliance costs, digital literacy, and procedural complexity.

The future success of GST compliance reforms will depend on achieving a balance between strict enforcement and taxpayer convenience. While technology-driven governance has undoubtedly improved efficiency and transparency, sustainable compliance ultimately requires simplification, stability in regulations, stronger grievance redressal systems and support for small businesses adapting to digital systems. GST has demonstrated the transformative potential of digital taxation in India, but its long-term effectiveness will depend on how inclusively and efficiently the system evolves in the years ahead. MA

References

1. *Press Information Bureau, Government of India. (2025, September 3). Recommendations of the 56th meeting of the GST Council*
2. *Basavanagouda, & Panduranga, V. (2022). Perspectives and role of GST practitioners in promoting GST compliance in India. Vision: The Journal of Business Perspective. Advance online publication.*
3. *Shacheendran, V. (2024). An analysis of GST barriers faced by business owners in India: An ISM approach. The IUP Journal of Accounting Research & Audit Practices, 23(1).*
4. *Singh, D. K., & Singh, B. P. (2024). GST and digital economy: Taxation challenges of e-commerce and online services. ShodhKosh: Journal of Visual and Performing Arts, 5(6), 3504–3510.*
5. *Gupta, R., Bhavyashree, B. M., & Tambad, J. (2026). GST 2.0 as a catalyst for structural transformation in India’s tax administration. European Economic Letters, 16(1), 867–873.*