

# Role of Technology in GST Compliance in India

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## Abstract

This study examines how technology and Goods and Services Tax (GST) compliance work together to achieve certain goals. It highlights the various strategies used by countries while assessing the different efficacy of contemporary technology solutions in achieving worldwide GST compliance. According to the report, there is a direct benefit to taxpayers and authorities when sophisticated technical solutions are paired with efficient compliance procedures—issues with using technology to channel compliance and analyze the need for customized approaches. The study's novel suggestions for maximizing the cooperation of technology and GST compliance are presented in the conclusion, providing insightful analysis of the dynamic environment and building resilience in the face of rapidly advancing global technology.

**Keywords:** Goods & Services Tax, GST Compliance, Tax Revenue, GST Returns

## INTRODUCTION

### Introduction to the topic

Economic policy coupled with historical change has significantly altered the tax environment, adding a great deal of complexity to compliance structures as well as redefining the boundaries of governance. The main component of this evolution is the Goods and Services Tax (GST), a comprehensive indirect tax system that is implemented by national governments all over the world. The complex interactions between technology and the GST system are examined in this essay, which also highlights the significant impact that technological advancements have had on enhancing and impacting GST structure compliance.

### Background Study

India's President and Government officially introduced the Goods and Services Tax (GST) on July 1, 2017, at midnight. In celebration of the launch, both chambers of parliament met for the first time at midnight on June 30 and July 1 in the Parliament's Central Hall. Although prominent figures from the entertainment and economic sectors, such as Ratan Tata, attended the session, the opposition boycotted it because they anticipated it would cause issues for middle-class and lower-class Indians. The Indian National Congress, the major opposition party, vehemently opposed the tax. It is one of the few midnight meetings that the parliament has ever convened; the others are the silver and golden jubilees commemorating that day and the proclamation of India's independence on August 15, 1947. The latest modification to the GST rates occurred on May 10, 2023, which mandated that taxpayer having a turnover of above ₹5 crore in either of the 2017–2018 fiscal years furnish e-invoices starting on August 1, 2023. The GST rates have been amended many times since its debut. Congressmen disregarded the introduction of the GST entirely. People from the Communist Parties of India, the DMK, and the Trinamool Congress joined them. Claiming that the administration was only seeking to rebrand the present taxing system, the parties said that they discovered almost no difference between the GST and the current taxation system. Moreover, they said

that the GST would negatively impact many Indians, particularly those in the middle, lower middle-, and lower-income categories, by raising current rates on necessities while lowering them on luxuries.

The GST's adoption represents a departure from conventional tax arrangements; therefore, compliance processes need to be reassessed to better align with the goals of a unified tax system. In this age of digital domination, the Goods and Services Tax (GST) must be implemented successfully while simultaneously advancing the integration of cutting-edge technological solutions. Technology interventions are essential to the symbiotic connection between GST and generation, the focus of this research, as they help manage the demands and complexity of the existing tax system.

The Goods and Services Tax (GST) is a worldwide tax administration paradigm shift that emphasizes transparency, efficiency, and minimizing the impacts of cascading effects. However, for these goals to be accomplished, generation must be perfectly incorporated into the framework of the tax system. Thus, by dissecting the difficult ways in which technology alters and reinterprets compliance dynamics, this research seeks to shed light on the intricate relationships between technology and GST.

Several tools and improvements designed to optimize GST compliance are essential components of this technological integration. These technological interventions, which include sophisticated statistical analytics, artificial intelligence applications, and real-time transaction monitoring, make up the virtual arsenal that is transforming the tax landscape. This essay explores the intricate and difficult situations that develop when generation is integrated within the GST framework, in addition to analyzing the advantages and effectiveness of this symbiotic connection.

In the context of a global economy that is growing more and more digitalized and in which financial transactions transcend national borders, the problematic conditions provided by this virtual frontier are many. The difficulties range from addressing privacy issues and maintaining robust record security to ensuring inclusivity in a technologically divided society and bridging the virtual divide. This paper aims to explore the complicated influence of the era on GST compliance, giving readers a thorough understanding of how technological innovations rearrange the boundaries of economic governance in a generation dominated by virtual change.

As people and companies navigate this convoluted and dynamic tax environment, it will become more important to comprehend the complex interplay between technology and GST. This paper attempts to add to the existing discussion by offering insights into the intricate dance between economic governance and technology innovation. To provide a proactive mentality that affects and guides the development of taxation systems in a generation that is distinguished by the seamless transition between the GST and the contemporary era, the novel goes beyond a historical critique.

## LITERATURE REVIEW

### **(Pramod, 2023)**

Many MSMEs' compliance problems have been resolved by the introduction of GST, which was intended to increase compliance for small firms in India. But there are still many problems that need immediate care. The expansion of MSMEs is hampered by post-implementation compliance concerns, according to pilot research conducted in Karnataka. The research emphasizes the need to implement regulatory changes to enhance compliance protocols and promote the general expansion of the MSME industry in India.

### **(Panduranga, 2022)**

In India's technologically advanced tax system, GST compliance is essential, and many taxpayers who are not tech-savvy use the services offered by GST practitioners. Reliability testing and factor analysis have

been used to find the variables affecting compliance. For a variety of services, the majority of customers abdicate their obligations to GST practitioners. This research offers a more thorough comprehension of GST concerns from the viewpoints of industry practitioners.

**(Malhotra, 2022)**

The Goods and Services Tax (GST) was imposed by the Indian government in July 2017 by the idea of one country, one tax. Increased income for goods like gasoline, alcohol, and natural gas has been facilitated by this proportional tax. The income loss resulting from the cess on certain items, however, has raised some worries. The Indian economy has been greatly impacted by GST, even amid the pandemic.

**(Deshmukh, 2022)**

India's federal system of government and economic well-being have greatly benefited from the Goods and Services Tax (GST). Nonetheless, measures are required to tackle the low ratio of taxes to GDP, distorted GST payers, unfavourable stakeholders' perceptions, and tax evasion. The effect of GST on economic growth, consumers, MSMEs, ease of doing business rankings, and the government's Aatmanirbhar Bharat initiative are all evaluated in this research using a case-based qualitative inquiry.

**(Jaggarwal, 2022)**

On July 1, 2017, India introduced the Goods and Services Tax (GST), an indirect tax based on consumption that replaced earlier indirect tax schemes. Low GST awareness and compliance was discovered in small businesses by research evaluating the knowledge and compliance levels of Indian taxpayers. The government should increase taxpayers' GST awareness to increase compliance since it is a significant positive predictor of GST compliance. The report offers recommendations for enhancing GST understanding.

**(Nandal, 2022)**

In India, complying with GST is essential as it strives to enhance the creation of tax revenue and compliance. Low levels of GST awareness and compliance were discovered in research evaluating Indian taxpayers, especially small businesses in the state of Haryana. According to the report, to increase compliance, the government should increase taxpayers' understanding of GST. The results provide suggestions for raising taxpayers' awareness of GST.

**(Patkar, 2022)**

The goal of the Goods and Services Tax (GST) implementation in India was to eliminate the need for companies to comply with several indirect taxes. To assist policymakers in comprehending compliance trends and implementing suitable measures, this study uses secondary data from the government to investigate the levels of business taxpayers' compliance with GST.

**(Rao, 2022)**

A "one country-one tax" and a "reform of the century," India's Goods and Services Tax (GST) reform has been a major accomplishment in this multicultural nation. For the nations involved in the Fund program, the reform has been a major driver of change and calls for statesmanlike leadership.

**(Mukherjee, 2020)**

GST The lack of money from the Goods and Services Tax (GST) collection presents issues for rules and tax administration, which may affect state budgets and fiscal management. Modest structural adjustments, such as raising the GST thresholds and lowering tax rates, might lessen the effect of the GST on the Indian economy. However, these policy choices have a large revenue effect, and tax compliance is not becoming better over time, which will further postpone the stability of the GST. Having an understanding of these issues may aid in the creation of solutions.

**(Shukla, 2019)**

The adoption of the Goods and Service Tax Network (GSTN) in India is impacted by social systems, organizational members, and individual traits. The usage of GSTN is highly influenced by behavioural control, perceived utility, subjective norms, and trust, according to research involving 204 small- and medium-sized company owners. The report makes recommendations regarding how the government might enhance GSTN acceptability.

**(Kumar, 2019)**

In July 2017, India replaced its 17 separate indirect taxes with the destination-based unified tax system, or GST. The absence of a comprehensive tax division strategy, political resistance, a shortage of competent labour, and confusing GST laws are some of the obstacles preventing its successful implementation. Based on their driving and dependent capabilities, these main obstacles are categorized into four groups by this research using interpretative structural modelling.

**(Chen, 2019)**

This research investigates the variables that affect the behaviour of Malaysian registered individuals regarding GST compliance. It focuses on economic variables such as the structure of the GST system, tax rate, audit, penalty, compound/fine, and audit, as well as psychological and sociological variables such as attitude toward GST and GST awareness. The objective is to put out a theoretical framework for improving the Malaysian economy's GST compliance.

**(Nayyar, 2018)**

The main tax reform in India, known as GST, unites indirect taxes such as the Central Excise Tax and VAT/Sales Tax to decrease tax evasion, boost transparency by maximizing the use of technology, and decrease corruption.

**(Manivel, 2017)**

GST is being implemented by the Indian government to replace indirect taxes and streamline the tax system. Technology will reduce fraud and duplicate claims, improve company and government processes, and speed the creation, uploading, payment, and filing of invoices.

**(Ughade, 2017)**

The Observer explores the record-generating function of the GST deployment in India. It tries to recognize the distinctions between present indirect taxes and GST, separate from the advantages and problems of GST. The GST framework promises unified tax levies, increased competitiveness and strong IT facilities. However, there are difficulties surrounding its influence on IT and compliance solutions for investors and e-commerce enterprises.

**RESEARCH METHODOLOGY****Problem Statement of the research**

This study aims to address the specific dynamics of technology-driven compliance procedures in the context of the Goods and Services Tax (GST). Although the literature that has already been written has acknowledged the general influence of technology on taxes, a closer look is needed to identify the complexities and obstacles related to the incorporation of technological tools into the GST compliance framework. By filling up a crucial knowledge vacuum regarding the complex possibilities and problems that arise from the convergence of technology and GST compliance, this study advances a more focused and thorough understanding of this crucial link.

### Research Gap

The research gap addresses the use of technology in Goods and Services Tax (GST) compliance is revolutionizing tax compliance, offering distinct chances and problems for enterprises to guarantee precise and effective GST compliance.

### Research Objectives

The objectives of the study are as follows.

- Analyze the status of Technology Interventions in GST Compliance at the Present.
- Analyze the impact of the GST mechanism using technology.
- Assess the challenges and opportunities arising from proper channelizing of Technology.
- To explore the possible outcome based on the use of technology for compliance.

### Research Questions

- Q1. Does Technology intervene in GST Compliance at the present?
- Q2. What is the impact of the GST mechanism using technology?
- Q3. What are the challenges and opportunities arising from proper channelizing of technology?
- Q4. Which is the possible outcome based through use of technology for compliance?

### Statement of Hypothesis

1. H<sub>0</sub>: The status of technology intervention in GST Compliance.  
H<sub>1</sub>: The status of technology does not intervene GST Compliance.
2. H<sub>0</sub>: There is impact in GST Mechanism using technology.  
H<sub>1</sub>: There is no impact in GST Mechanism while using technology.
3. H<sub>0</sub>: There are challenges and opportunities arising from use of technology.  
H<sub>1</sub>: There are no challenges and opportunities from the use of technology.
4. H<sub>0</sub>: There are positive outcomes from the use of technology.  
H<sub>1</sub>: There are is no positive outcome from the use of technology.

### Data Collection Instrument

Since the data is primarily analytical, we usually take up secondary sources of data for analysis. These include:

- Annual Reports from Government Agencies
- News articles
- Internal and Quarterly Reports

### Limitations of the study

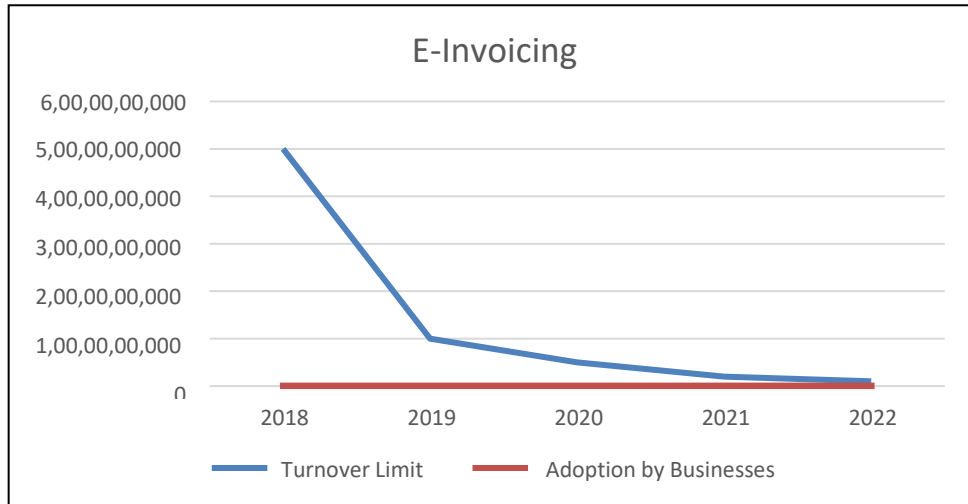
- One of the limitations of this study is the restricted timeframe may impact the depth and breadth of insights gained, as a longer period of involvement would provide a more comprehensive understanding.
- Another limitation is the restricted access to certain confidential data availability.

## PRESENTATION & ANALYSIS OF DATA

**1. E-Invoicing Adoption:** - About the Goods and Services Tax (GST), e-invoicing is the electronic age of invoices with a standardized format, which is regarded as an important system. The goals of e-invoicing are to decrease tax evasion, increase transparency, and simplify the whole tax compliance process.

Years	Turnover Limit	Adoption by Businesses
2018	500,00,00,000	0

2019	100,00,00,000	0
2020	50,00,00,000	50,00,00,000
2021	20,00,00,000	75,00,00,000
2022	10,00,00,000	1,00,00,00,000



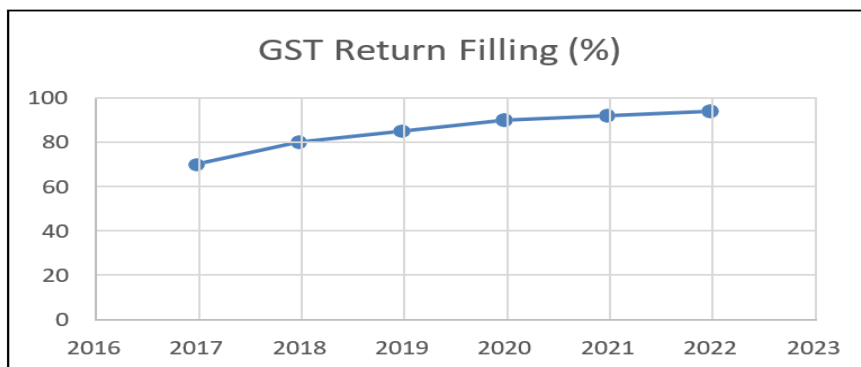
(Source: Author)

In recent years, e-invoicing boomed since the economic conditions have significantly improved. The growth trajectory remains strong with controlled fraud detection it has improved efficiency. We could witness to see that many companies will adopt e-invoicing in the upcoming years.

**2. GST Returns Filing (Electronically):** - This is a mandatory process for business under the GST Act. In this process, it involves submitting the details of sales, purchases, and tax payments to the tax authorities.

Years	Percentage (%)
2017	70
2018	80
2019	85
2020	90
2021	92
2022	94

(Source: Author)





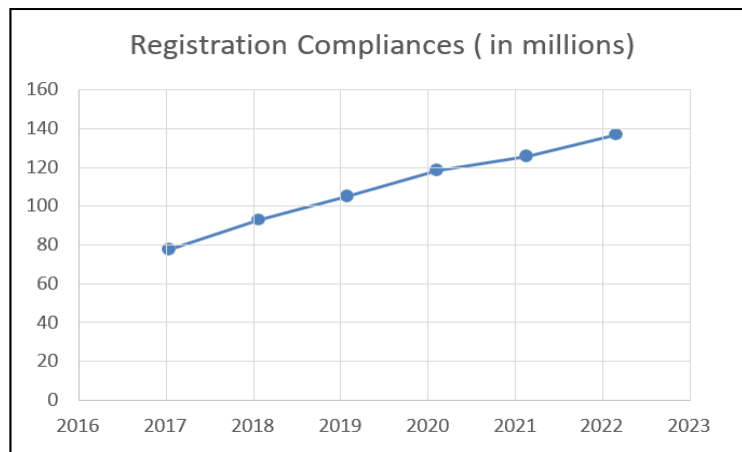
The GST return filling has increased in recent years but between 2019 to 2020 which could be due to the change in government regulations or economic conditions in India. In 2022 is at a time high which is a positive sign that the company is on track to meet its obligations.

**3. Registration Compliance:** - The procedure and specifications that companies must follow when registering for the Goods and Services Tax (GST) are referred to as "registration compliance."

The figures depicted in the below table are referred to in as millions.

Years	Businesses
2017	80
2018	95
2019	107
2020	120
2021	127
2022	138

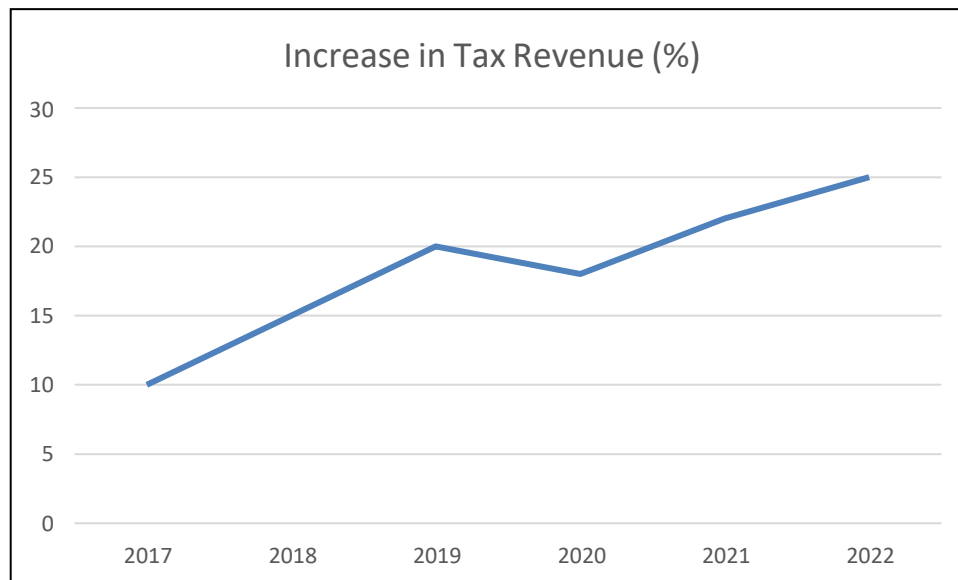
(Source: Author)



Regional differences have an impact on growth, but overall, the number of registered enterprises has increased consistently from 80 million in 2017 to 140 million in 2022. But problems like non-compliance still exist, therefore focused efforts are required.

**4. Tax Revenue Collection:** - An indicator that indicates the tax received by the government by way of Indirect taxes periodically.

Years	Increase (%)
2017	10
2018	15
2019	20
2020	18
2021	22
2022	25



(Source: Author)

From 2017 to 2022, there was a consistent increase in GST income, with an average annual growth of almost 22%. 2021 saw growth of over 25%, perhaps because of legislative reforms or economic recovery. The precise rise is yet unknown, however.

## FINDINGS, SUMMARY & CONCLUSION

### Findings of the study

- E-invoicing growth trajectory remains strong.
- 2023's highest GST return filling, indicating the company's compliance.
- Consistent growth in registration of companies but the non-compliance still exists.
- The average annual growth in Tax revenue received is nearly 22%.

### Summary

In summary, the goal of this study was to examine important facets of the connection between technology and Goods and Services Tax (GST) compliance. The analysis of the state-of-the-art technology solutions for GST compliance exposed a heterogeneous environment, illustrating the various strategies that different countries utilize to promote tax compliance. The study also looked at how technology affects the effectiveness of GST compliance procedures, illuminating how these instruments help to simplify operations and lessen the workloads of both authorities and taxpayers.

### Conclusion

The complicated topic of GST compliance calls for a blend of cutting-edge tactics and technology developments. The potential for increased efficiency has been shown by the different technology landscapes of countries, yet issues like data security, privacy, and equal access still exist. According to the study, to provide a framework that is flexible and adaptable, context-specific solutions are required to promote innovation and maximize the benefits of technology and GST compliance. This also proves that all the hypothesis is satisfied hence H0 is satisfied and accepted.



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