



# “A Study on Digitalization and Its Impact on Direct and Indirect Tax Collection in India”

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## How to Cite this Article:

Kamath, V. H. (2026). “A Study on Digitalization and Its Impact on Direct and Indirect Tax Collection in India”. International Journal of Creative and Open Research in Engineering and Management, <i>02</i>(05).  
<https://doi.org/10.55041/ijcope.v2i5.074>

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<https://doi.org/10.55041/ijcope.v2i5.074>

## ABSTRACT

This study explores how digitalization has influenced direct and indirect tax collection in India. Over the past few years, the Government of India has introduced several digital initiatives such as GST, e-filing systems, and digital payment platforms to modernize the taxation system. These reforms have played a significant role in making tax administration more efficient, transparent, and accessible.

The study is based on secondary data collected from government reports, official publications, and academic sources. The findings suggest that digitalization has helped reduce manual errors, curb tax evasion, widen the tax base, and enable real-time tracking of financial transactions. It has also simplified the tax filing process, making it quicker and more convenient for taxpayers.

At the same time, certain challenges still remain. Issues like technical glitches, cybersecurity concerns, lack of digital literacy, and inadequate infrastructure can limit the full potential of digital systems.

Overall, the study concludes that digitalization has brought a positive transformation in India’s taxation system and has supported economic growth. However, continued efforts in improving infrastructure, spreading awareness, and strengthening policies are necessary to make the system more effective.

**Keywords:** Digitalization, GST, E-filing, Tax Compliance, Direct Tax, Indirect Tax, Revenue Collection, Transparency, India.



## **Introduction**

In recent years, digital transformation has significantly reshaped India's economy, including its taxation system. With the rapid growth of information and communication technology, the Government of India has introduced several initiatives to modernize tax administration and improve efficiency and transparency. A key reform is the implementation of the Goods and Services Tax (GST), which replaced multiple indirect taxes with a unified system supported by a digital platform for registration, return filing, payments, and compliance tracking.

In addition, direct tax administration has been strengthened through e-filing systems, online assessments, and digital verification processes. Platforms like the Income Tax e-filing portal, along with digital payment methods such as UPI and net banking, have simplified tax procedures and encouraged cashless transactions.

These reforms have reduced manual errors, minimized tax evasion, and improved compliance. Advanced tools like data analytics have enabled real-time monitoring and better decision-making. However, challenges such as technical issues, cybersecurity risks, and limited digital awareness still need to be addressed.

## **Objectives of the Study**

- To understand the concept and role of digitalization in India's taxation system
- To examine the impact of digital initiatives on **direct tax collection**
- To analyse the effect of digitalization on **indirect tax collection**
- To identify the challenges involved in implementing digital taxation systems

## **Research Questions**

- How has digitalization improved tax collection in India?
- What are the major challenges faced in implementing digital taxation systems?

## **Scope of the Study**

- The study is limited to the Indian context
- Focuses on recent developments in digital taxation
- Covers systems such as:
  - GST
  - Income tax e-filing
  - Digital payment platforms
- Based on **secondary data sources**, including:
  - Government reports
  - Official publications
  - Academic research
- Aims to:
  - Understand the impact of digitalization on tax administration and collection
  - Identify limitations and areas for improvement



## Review of Literature

### Study 1

Kumar and Sharma (2022) explored how digitalization has affected GST compliance in India. Their study shows that the introduction of the Goods and Services Tax has significantly improved compliance levels, mainly because of its integrated digital system. Features like online return filing, invoice matching, and input tax credit have made the system more transparent and reduced opportunities for tax evasion. However, the authors also noted that in the initial stages, many small businesses struggled due to technical issues and a lack of awareness, which slowed down smooth implementation.

### Study 2

Sharma (2022) examined the impact of the Income Tax e-filing portal on direct tax compliance. The study found that e-filing has made the tax return process much simpler and more user-friendly by reducing paperwork and minimizing manual errors. Features such as pre-filled forms and online verification have encouraged more people to file their returns. At the same time, the study highlighted that digital illiteracy and occasional system issues remain challenges, especially for elderly individuals and those living in rural areas.

### Study 3

A report by the Ministry of Finance (2023) analyzed the broader impact of digital reforms on tax collection in India. It concluded that initiatives like GST, digital payments, and the use of data analytics have led to a noticeable increase in tax revenue. The report emphasized that digitalization has improved transparency and accountability in tax administration. It also pointed out that real-time tracking and better data integration have strengthened monitoring systems and reduced tax leakage.

### Study 4

Patel (2023) focused on the link between digital payment systems and tax transparency. The study found that the growing use of platforms such as UPI has created a clear record of transactions, making it easier for tax authorities to monitor financial activities. This has helped reduce tax evasion and expand the tax base. The research concluded that digital payments are an important factor in improving overall tax compliance.

## Summary/Conclusion

Overall, the studies reviewed suggest that digitalization has had a positive impact on India's taxation system. GST and e-filing systems have made tax processes more efficient and transparent, while digital payments have improved monitoring and accountability. Although challenges like technical issues and digital illiteracy still exist, the overall evidence shows that digital reforms have strengthened tax administration and increased revenue collection.

## Research Methodology

### Research Design

This study follows a combination of descriptive and analytical research design. The descriptive approach is used to explain the concept of digitalization in taxation and to highlight the key reforms introduced in India. It helps in building a clear understanding of systems such as GST, e-filing, and digital payment methods. On the other hand, the analytical approach focuses on examining how these digital initiatives have influenced direct and indirect tax collection. By analysing available data, the study identifies trends and evaluates how effective these reforms have been in improving tax administration.



## Data Collection

- The study is based entirely on **secondary data**
- Data collected from reliable and authentic sources such as:
  - Government reports
  - Official publications
  - Research journals
  - Trusted online platforms
- Key sources include:
  - Ministry of Finance reports
  - GST Council publications
  - Income Tax Department portals
  - Academic studies
- These sources provide a strong foundation to understand:
  - Growth of digital taxation
  - Impact on tax collection
  - Challenges in implementation

## Tools Used

- Use of **charts, graphs, and comparative analysis** for data interpretation
- Graphical tools include:
  - Bar graphs
  - Pie charts
  - Line graphs
- These tools help in clearly presenting trends in tax collection over time
- Comparative analysis is used to:
  - Compare tax revenue before and after digitalization
  - Highlight the effectiveness of digital reforms
  - Makes findings easy to understand and interpret

## Limitations of the Study

- Based only on **secondary data**, which may not reflect real-time conditions
- May not fully capture **ground-level realities**
- **Time constraints** limited the depth of analysis



- Study is restricted to:
  - India only
  - Recent developments in digital taxation
- Findings may have **limited applicability** to other countries or different time periods

### **Digital Tax Reforms in India**

Digitalization has brought a major shift in India's taxation system, making it more efficient, transparent, and easier to manage. Over the years, the Government of India has introduced several important reforms to modernize tax administration and improve revenue collection. These changes have not only simplified processes for taxpayers but also strengthened the overall system.

### **Goods and Services Tax (GST)**

The introduction of the Goods and Services Tax (GST) in 2017 was a landmark reform in India's indirect taxation system. It replaced multiple taxes such as VAT, service tax, and excise duty with a single, unified tax structure. GST is supported by a digital platform called the GST Network (GSTN), which allows businesses to register, file returns, and make payments online. This system has reduced the problem of tax cascading, improved compliance, and increased transparency in transactions.

### **E-filing of Income Tax**

The Income Tax e-Filing Portal has made the process of filing taxes much simpler and more convenient. Taxpayers can now file returns, verify documents, and check refund status online without visiting tax offices. Features like pre-filled forms and online assessments have reduced paperwork and minimized manual errors. Overall, this system has improved accuracy and made tax filing quicker and more user-friendly.

### **Digital Payment Systems**

The rise of digital payment systems such as UPI, net banking, and mobile wallets has encouraged people to move towards cashless transactions. These platforms create a clear digital record of financial activities, which helps tax authorities track income and reduce tax evasion. As more people adopt digital payments, the tax base has expanded, leading to better revenue collection.

### **Automation and Artificial Intelligence in Taxation**

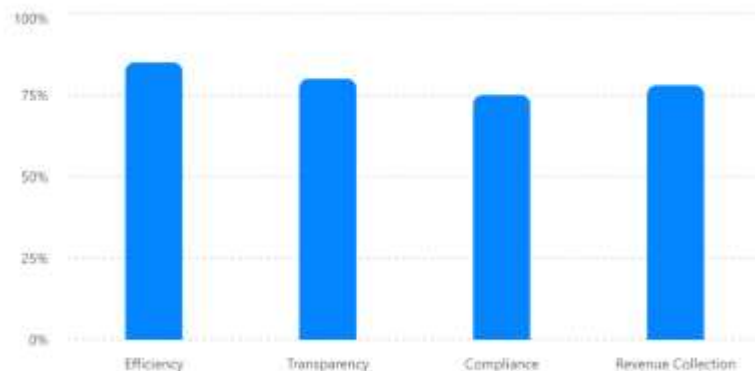
Modern technologies like automation and Artificial Intelligence (AI) have further strengthened tax administration. These tools help in analysing large amounts of data, detecting fraud, and assessing risks more effectively. Automated systems allow faster processing of tax returns and enable real-time monitoring of transactions. This not only reduces manual workload but also improves the overall efficiency and decision-making of tax authorities.



## Diagram: Impact of Digital Tax Reforms on Tax System

### Impact of Digital Tax Reforms in India

Comparative improvement in key areas after implementation of digital taxation systems.



Overall, these digital reforms have helped transform India's taxation system into one that is more transparent, efficient, and easier for taxpayers to use, while also supporting the country's economic growth.

### Impact of Digitalization on Tax Collection

Digitalization has brought a significant change in the way taxes are collected in India. It has made the system more efficient, transparent, and easier to comply with for both taxpayers and authorities. The effects of these digital changes can be clearly seen in both direct and indirect tax systems, where processes have become faster, more accurate, and more reliable.

#### Impact on Direct Tax

Digitalization has played a major role in improving the collection of direct taxes, especially income tax. The introduction of online systems like the Income Tax e-Filing Portal has made it much easier for taxpayers to file their returns quickly and accurately. Because of this convenience, more people are now filing their income tax returns than before.

In addition, digital platforms have made it easier for tax authorities to track financial transactions. By linking systems such as PAN, Aadhaar, and bank accounts, authorities can better understand income sources and identify any mismatches. This has reduced the chances of underreporting income. Tools like data analytics and automated systems also help in detecting tax evasion and ensuring timely compliance. Overall, digitalization has made direct tax collection more efficient and reliable.

#### Impact on Indirect Tax

The introduction of the Goods and Services Tax (GST) has brought a major change in the way indirect taxes are collected in India. By replacing multiple taxes with a single system, GST has simplified the taxation structure. Since it operates on a digital platform, businesses are required to file returns and upload invoices online, making the entire process more transparent and traceable.

One of the biggest advantages of GST is its ability to reduce tax evasion. The input tax credit system encourages businesses to report transactions honestly, as they can claim credits only if taxes have been properly paid. This has improved compliance and increased government revenue. Moreover, real-time data allows authorities to monitor transactions closely and quickly detect any irregularities.



## Overall Impact

Overall, digitalization has brought noticeable improvements to India's taxation system. Processes have become more transparent, as most activities are now carried out online, reducing the chances of corruption and manual errors. Efficiency has also increased, with faster processing, automated systems, and less paperwork.

At the same time, accountability has improved because digital records provide clear proof of transactions and tax payments. In conclusion, digitalization has had a positive impact by improving compliance, reducing tax evasion, and increasing revenue. However, continuous efforts to improve technology, infrastructure, and awareness are important to maintain these benefits and overcome existing challenges.

## Challenges in Digital Taxation

While digitalization has brought many improvements to India's taxation system, it is not without its challenges. These issues can affect how smoothly and effectively the system works for both taxpayers and authorities.

One of the most common problems is related to technical issues in online tax portals. Platforms like the Income Tax e-Filing Portal and the GST Network sometimes experience server downtime, slow processing, or system glitches, especially during peak filing periods. This can cause inconvenience for users and may even lead to delays in filing returns.

Another major concern is cybersecurity. Since digital tax systems deal with large amounts of sensitive financial data, they are at risk of hacking, data breaches, and unauthorized access. Strong security measures and proper data protection are essential to maintain trust in these systems.

Digital illiteracy is also a significant barrier. Many small taxpayers, elderly individuals, and people in rural areas may not be comfortable using online platforms. This makes it difficult for them to complete tax-related tasks without help.

In addition, poor internet connectivity in rural and remote regions can limit access to digital services. Without reliable internet, it becomes challenging to file returns or make payments online.

In conclusion, although digital taxation has made the system more efficient and transparent, addressing these challenges is important to ensure that it remains accessible and effective for everyone.

## Data Analysis and Interpretation

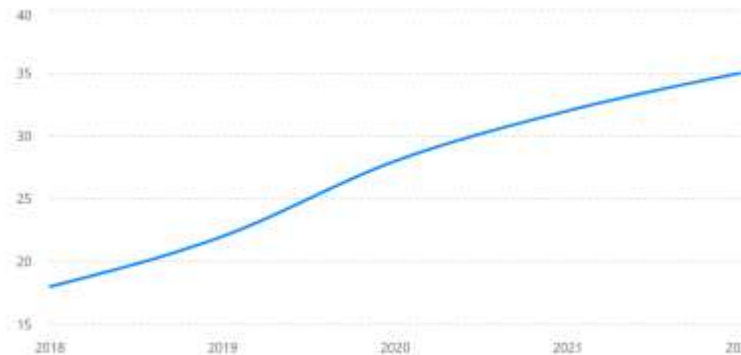
This chapter focuses on analysing how digitalization has influenced tax collection in India. It looks at trends observed over recent years to understand the overall impact of digital reforms. The analysis is supported by charts and graphs, which help present the data in a clear and easy-to-understand manner, making it simpler to interpret the changes and patterns.



## Trend Analysis of Tax Collection (Line Graph)

### Growth in Tax Collection Over Years

Trend showing increase in tax revenue after digital reforms in India.



The line graph clearly shows a steady rise in tax collection over the years. This consistent upward movement suggests that digital reforms like GST, e-filing, and digital payments have played a key role in boosting revenue. The increase becomes more noticeable after 2020, indicating better compliance and stronger monitoring systems. Overall, the trend reflects how digitalization has helped strengthen and improve the effectiveness of India's taxation system.

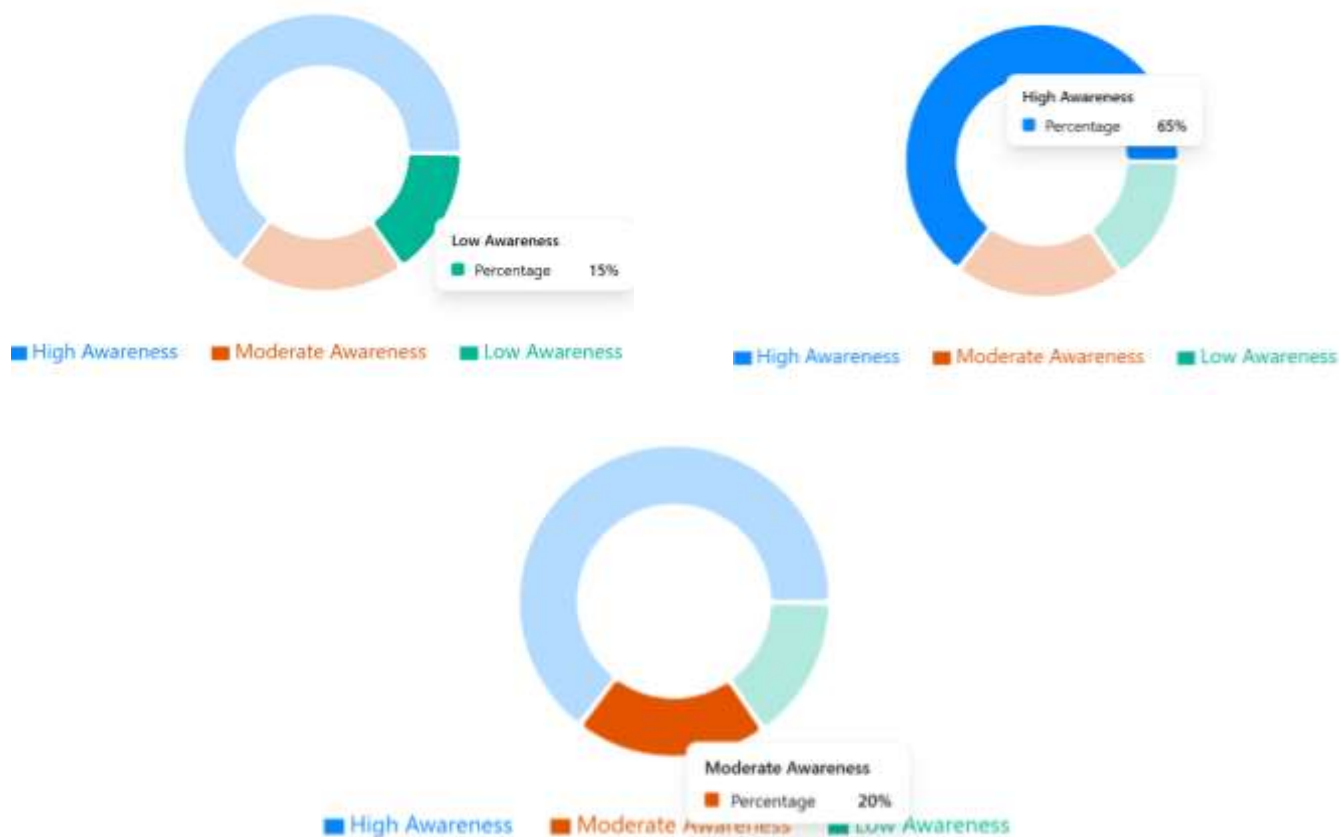
## Awareness and Compliance (Pie Chart)

### Taxpayer Awareness and Compliance Levels

Distribution of taxpayer behaviour in response to digital taxation systems.

- High Awareness
- Moderate Awareness
- Low Awareness





The pie chart shows how aware taxpayers are about digital tax systems and how well they comply with them. A large portion, around 65%, falls under high awareness, which means most taxpayers are quite familiar with digital platforms and processes. About 20% have a moderate level of awareness, while only 15% fall into the low awareness category. This clearly suggests that digital initiatives have been effective in spreading awareness and encouraging people to follow tax regulations properly.

### 7.3 Interpretation of Trends

The overall data points to a strong and positive link between digitalization and tax collection. The steady increase in tax revenue over the years reflects better compliance, improved tracking of financial transactions, and a reduction in tax evasion. Digital platforms have made tax-related processes simpler, more transparent, and easier to access, which has encouraged more taxpayers to participate.

In addition, higher levels of awareness among taxpayers have contributed to better compliance, which in turn supports revenue growth. Overall, the analysis shows that digitalization has played a key role in strengthening India's tax administration by making it more efficient, transparent, and accountable.

### Key Findings

The study shows that digitalization has greatly improved the efficiency of India's taxation system. Online platforms like the Income Tax e-Filing Portal and the introduction of the Goods and Services Tax have made tax processes smoother and faster, reducing manual work for both taxpayers and authorities. Transparency has also



increased, as digital records and real-time tracking make it easier to monitor transactions and reduce errors or corruption.

Another important finding is that tax evasion has decreased significantly. Since most transactions are now recorded digitally, it has become much harder to hide income or manipulate data. At the same time, compliance levels have improved, with more taxpayers regularly filing their returns due to the simplicity and convenience of digital platforms.

## Discussion

The findings clearly suggest that digitalization has brought a major positive change to India's taxation system. By integrating technology into tax administration, the system has become more transparent, efficient, and accountable. It has also encouraged taxpayers to comply voluntarily, as processes are now easier and more accessible.

However, the full benefits of digital taxation can only be achieved if existing challenges are addressed. Issues such as technical problems and lack of digital literacy still need attention. Improving digital infrastructure and increasing awareness among users will be important to ensure that these reforms benefit everyone and remain effective in the long run.

## Conclusion

The study concludes that digitalization has brought a positive and meaningful change to tax collection in India. Reforms such as the Goods and Services Tax and the Income Tax e-Filing Portal have made the taxation system more efficient, transparent, and easier to comply with. Digital tools have improved the ability to track transactions, reduced tax evasion, and contributed to higher revenue collection. The shift from traditional manual processes to digital systems has also made tax-related activities more convenient and accessible for taxpayers. Overall, digitalization has strengthened the taxation framework and supported economic growth, although there is still scope for further improvement.

## Suggestions

To make digital taxation more effective, a few important steps can be considered. Improving digital infrastructure, especially in rural and remote areas, is essential so that everyone can access online tax services easily. Increasing awareness and digital literacy among taxpayers will help them use these platforms more confidently and correctly. Strengthening cybersecurity measures is also important to protect sensitive financial data and maintain trust in the system. In addition, regular updates and proper maintenance of tax portals can help reduce technical issues and improve the overall user experience. Focusing on these areas will make the digital taxation system more inclusive, secure, and efficient in the long run.

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