

GST Awareness, Compliance Behaviour, Digital Tax Practices and Business Performance among Small and Medium Enterprises: An Empirical Analysis

By.,

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Abstract

The Goods and Services Tax (GST) has transformed India's indirect taxation framework by introducing a technology-driven and unified tax system aimed at improving transparency, compliance, and business efficiency. This study examines the influence of GST awareness on compliance behaviour and GST effectiveness, evaluates the impact of GST compliance on business performance, and analyses the effect of digital GST practices on taxpayer satisfaction among Small and Medium Enterprises (SMEs). A quantitative research design was adopted using a structured questionnaire administered to 200 SME respondents. The collected data were analysed using descriptive statistics, reliability analysis, Pearson correlation, and simple linear regression. The findings indicate that GST awareness significantly enhances compliance behaviour and perceived GST effectiveness, while GST compliance contributes positively to business performance. Furthermore, digital GST practices significantly improve taxpayer satisfaction through simplified compliance procedures and enhanced transparency. All four hypotheses were statistically supported ($p < 0.001$), confirming the positive relationships among the study variables. The study concludes that taxpayer education, digital transformation, and effective compliance management are fundamental to strengthening GST implementation among SMEs. The findings provide useful implications for policymakers, tax administrators, and business managers seeking to improve voluntary compliance and promote sustainable business growth under the GST regime.

Keywords: *Goods and Services Tax (GST), GST Awareness, GST Compliance, Digital GST Practices, Business Performance, Taxpayer Satisfaction, GST Effectiveness, Small and Medium Enterprises (SMEs), Tax Administration, India.*

CHAPTER 1: INTRODUCTION

1.1 Introduction and Background of the Study

The Goods and Services Tax (GST) is one of the most significant indirect tax reforms introduced in India with the objective of creating a unified, transparent, and efficient taxation system. Implemented on 1 July 2017, GST replaced multiple indirect taxes levied by the Central and State Governments, including Value Added Tax (VAT), Central Excise Duty, Service Tax, Entry Tax, Luxury Tax, and several other levies. By integrating these taxes into a single comprehensive framework, GST sought to eliminate the cascading effect of taxation, improve tax compliance, facilitate interstate trade, and strengthen economic integration across the country.

The introduction of GST represented a transformational shift in India's indirect taxation system and significantly altered the tax compliance environment for business enterprises. Unlike the previous fragmented tax structure, GST introduced a destination-based tax system supported by technology-driven compliance mechanisms such as electronic registration, online return filing, e-invoicing, e-way bills, and digital payment systems. These reforms were intended to simplify tax administration while simultaneously improving transparency, accountability, and revenue mobilisation. The digital architecture of GST has encouraged greater formalisation of businesses and strengthened the overall tax ecosystem.

Small and Medium Enterprises (SMEs) constitute a vital component of the Indian economy by contributing significantly to employment generation, industrial production, exports, and regional economic development. Despite their economic importance, SMEs frequently encounter challenges in adapting to changing taxation policies due to limited financial resources, inadequate technological infrastructure, and insufficient awareness of regulatory requirements. The transition to GST required enterprises to adopt digital accounting systems, maintain systematic financial records, and comply with periodic return filing obligations. Consequently, the effectiveness of GST implementation among SMEs largely depends upon taxpayer awareness, compliance behaviour, digital readiness, and organisational capabilities.

Over the years, the Government of India has introduced several policy initiatives aimed at simplifying GST compliance through continuous amendments, technological improvements, taxpayer facilitation centres, awareness programmes, and digital service enhancements. Although these initiatives have substantially improved the GST ecosystem, variations continue to exist in the level of awareness, compliance practices, and business outcomes among SMEs. Understanding these variations is important for designing effective policy interventions that promote voluntary compliance and strengthen business competitiveness.

Against this background, the present study investigates the influence of GST awareness on compliance behaviour, examines the impact of GST compliance on business performance, evaluates the role of digital GST practices in improving taxpayer satisfaction, and analyses the relationship between GST awareness and perceived GST effectiveness among Small and Medium Enterprises. The findings are expected to contribute to both academic literature and policy formulation by providing empirical evidence regarding the determinants of successful GST implementation.

1.2 Statement of the Problem

The implementation of GST has fundamentally transformed India's indirect taxation system; however, many SMEs continue to face practical challenges associated with compliance, digital adoption, procedural complexity, and frequent regulatory updates. Limited awareness of GST provisions often results in delayed return filing, incorrect documentation, and increased compliance costs. Although the GST framework aims to simplify taxation and improve transparency, the extent to which awareness, compliance behaviour, and digital practices influence business performance and taxpayer satisfaction remains insufficiently understood at the SME level.

Existing studies have predominantly focused on macroeconomic outcomes, tax administration, or sector-specific experiences, while relatively fewer empirical investigations have simultaneously examined the interrelationships among GST awareness, compliance, digital practices, business performance, taxpayer satisfaction, and GST effectiveness. This research addresses this gap by empirically examining these relationships among SMEs.

1.3 Need for the Study

The study is important for several reasons:

1. GST continues to evolve through periodic policy reforms and technological improvements.
2. SMEs contribute substantially to India's economic growth and require effective tax compliance mechanisms.
3. Understanding taxpayer awareness helps policymakers design targeted educational initiatives.
4. Digital GST practices have become increasingly important for improving compliance efficiency.
5. Empirical evidence can support future policy reforms aimed at simplifying GST administration.
6. The study contributes to the limited empirical literature linking GST awareness, compliance behaviour, digital practices, and business performance.

1.4 Research Gap

A review of existing literature indicates that most GST-related studies have examined taxpayer perception, implementation challenges, or macroeconomic implications independently. Limited research has investigated the integrated influence of GST awareness, GST compliance, digital GST practices, taxpayer satisfaction, business performance, and GST effectiveness within a single empirical framework. Furthermore, relatively few studies have simultaneously applied reliability analysis, correlation analysis, and regression modelling to examine these interrelationships among SMEs. The present study attempts to address these gaps by developing a comprehensive empirical model.

1.5 Significance of the Study

The study offers both theoretical and practical significance.

From an academic perspective, it enriches the literature on indirect taxation by examining the behavioural and organisational dimensions of GST implementation. From a managerial perspective, the findings assist SME owners and managers in understanding the importance of awareness, compliance, and digital adoption for improving organisational performance. The study also provides useful insights for tax administrators and policymakers in designing awareness programmes, improving digital infrastructure, simplifying compliance procedures, and strengthening taxpayer support systems.

1.6 Objectives of the Study

The study was undertaken with the following objectives:

1. To examine the level of GST awareness among Small and Medium Enterprises.

2. To analyse the influence of GST awareness on GST compliance.
3. To evaluate the impact of GST compliance on business performance.
4. To examine the influence of digital GST practices on taxpayer satisfaction.
5. To analyse the influence of GST awareness on perceived GST effectiveness.

1.7 Research Hypotheses

The following hypotheses were formulated:

H₁: GST Awareness has a significant positive effect on GST Compliance.

H₂: GST Compliance has a significant positive effect on Business Performance.

H₃: Digital GST Practices have a significant positive effect on Taxpayer Satisfaction.

H₄: GST Awareness has a significant positive effect on GST Effectiveness.

1.8 Conceptual Framework

The conceptual framework proposes that GST Awareness directly influences GST Compliance and GST Effectiveness. GST Compliance subsequently contributes to improved Business Performance, while Digital GST Practices enhance Taxpayer Satisfaction. These relationships collectively explain the effectiveness of GST implementation among SMEs.

Conceptual Relationships

- ☐ GST Awareness → GST Compliance
- ☐ GST Awareness → GST Effectiveness
- ☐ GST Compliance → Business Performance
- ☐ Digital GST Practices → Taxpayer Satisfaction

1.9 Scope of the Study

The study focuses on Small and Medium Enterprises operating in manufacturing, trading, and service sectors. It examines the relationships among GST awareness, compliance behaviour, digital GST practices, taxpayer satisfaction, business performance, and GST effectiveness. The research is limited to organisational and behavioural dimensions of GST implementation and does not examine macroeconomic or fiscal policy impacts.

1.10 Limitations of the Study

The study is subject to certain limitations:

1. The research adopts a cross-sectional design; therefore, changes over time are not examined.
2. The findings are based on responses obtained from SMEs and may not be directly generalisable to large corporations.
3. The study focuses on selected behavioural and organisational variables and does not include all possible determinants of GST compliance.
4. The empirical analysis is based on quantitative responses and does not incorporate qualitative stakeholder perspectives.
5. The conclusions are constrained by the characteristics of the selected sample and the scope of the variables investigated.

CHAPTER 2: REVIEW OF LITERATURE

2.1 Introduction

The implementation of the Goods and Services Tax (GST) has generated extensive academic and policy interest because of its implications for tax administration, business performance, compliance behaviour, and digital transformation. Researchers have examined GST from multiple perspectives, including compliance costs, taxpayer awareness, digital adoption, SME performance, and economic formalisation. The following review presents significant studies that provide the theoretical and empirical foundation for the present investigation.

2.2 Review of Literature

1. Bird and Gendron (2007): examined the implementation of Value Added Tax (VAT)/GST systems in developing and transitional economies. The authors argued that a successful GST system requires a simple tax structure, efficient administration, taxpayer education, and strong digital infrastructure. They concluded that GST reforms improve tax transparency and revenue mobilisation when supported by effective compliance mechanisms.

2. James and Alley (2004): analysed behavioural aspects of tax compliance and observed that voluntary compliance depends on taxpayer awareness, administrative simplicity, trust in government institutions, and perceived fairness of the tax system. The study emphasised that education and simplified procedures are fundamental to improving long-term compliance behaviour.

3. Keen (2013): examined indirect tax reforms across emerging economies and concluded that GST/VAT systems reduce cascading taxation, improve market efficiency, and strengthen fiscal administration. The study highlighted that technology-driven tax administration significantly enhances compliance and administrative transparency.

4. Evans et al. (2014): investigated tax compliance costs experienced by small businesses across different countries. Their findings indicated that digital tax administration substantially reduces compliance costs, improves reporting efficiency, and simplifies regulatory procedures for business enterprises.

5. Government of India (2017): The enactment of the Central Goods and Services Tax Act, 2017 established the legal framework for India's unified indirect taxation system. The legislation introduced destination-based taxation, input tax credit mechanisms, electronic return filing, and integrated compliance procedures intended to improve tax administration and reduce cascading taxes.

6. World Bank (2017): assessed India's GST implementation and reported that the reform simplified indirect taxation, improved market integration, and introduced special provisions for SMEs, including composition schemes intended to reduce compliance burdens. The report also recognised that digital compliance requirements created initial adjustment challenges for smaller enterprises.

7. OECD (2019): reported that modern tax administrations increasingly rely on digital technologies to improve compliance monitoring, taxpayer services, transparency, and administrative efficiency. The report concluded that integrated digital tax systems contribute significantly to improved voluntary compliance and taxpayer satisfaction.

8. World Bank (2020): observed that digital taxation reforms strengthen business formalisation by improving tax administration, reducing regulatory complexity, and encouraging enterprises to participate in the formal economy. The report emphasised that simplified digital compliance systems improve the ease of doing business.

9. International Monetary Fund (2021): highlighted that sustainable tax reforms require effective digital infrastructure, taxpayer education, simplified compliance procedures, and transparent administrative practices. According to the report, technology-enabled tax systems improve revenue administration while strengthening taxpayer confidence.

10. Deshmukh (2022): analysed the macroeconomic implications of GST implementation in India and concluded that GST has contributed to improving economic integration, transparency, and indirect tax administration. The study also noted that continued policy refinements and technological improvements are necessary for strengthening business compliance.

11. World Bank (2023): emphasised that business-friendly tax administration depends upon simplified compliance procedures, efficient digital platforms, and regulatory transparency. The report observed that improvements in digital governance enhance enterprise competitiveness and encourage formal business operations.

12. Goel and Sharma (2025): examined the impact of GST on Indian SMEs and reported that GST promoted business formalisation, digital adoption, and wider market participation. However, the study also identified compliance burden, working capital constraints, and delays in input tax credit refunds as continuing challenges. The authors recommended simplified compliance procedures, faster refund mechanisms, and stronger digital support for SMEs.

2.3 Research Gap

The reviewed literature demonstrates that GST has significantly improved indirect tax administration, transparency, and business formalisation. Nevertheless, most studies examine GST awareness, compliance, digital taxation, or business performance independently. Limited empirical evidence simultaneously investigates the relationships among GST awareness, GST compliance, digital GST practices, taxpayer satisfaction, business performance, and GST effectiveness using an integrated analytical framework. The present study addresses this gap by empirically examining these constructs together through reliability analysis, correlation analysis, and regression modelling among SMEs.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Research methodology provides the systematic framework for conducting scientific investigations and ensures that the research objectives are achieved through appropriate methods of data collection, measurement, and statistical analysis. It explains the research design, target population, sampling procedure, data collection instruments, variable measurement, and analytical techniques adopted in the study. Since the present research investigates the influence of GST awareness, GST compliance, digital GST practices, business performance, taxpayer satisfaction, and GST effectiveness among Small and Medium Enterprises (SMEs), a quantitative empirical approach was adopted. The methodology was

designed to ensure reliability, objectivity, and statistical validity, thereby enabling meaningful interpretation of the relationships among the study variables.

3.2 Research Design

The present study employed a descriptive and explanatory research design. The descriptive component was used to examine the demographic characteristics and GST-related practices of SME respondents, while the explanatory component investigated the causal relationships among GST awareness, GST compliance, digital GST practices, business performance, taxpayer satisfaction, and GST effectiveness through regression analysis.

3.3 Nature of the Study

The investigation is quantitative, cross-sectional, and empirical in nature. Quantitative methods were adopted because they permit objective measurement of respondents' perceptions and facilitate the application of statistical techniques. The cross-sectional design enabled the collection of responses at a single point in time, making it suitable for analysing the existing level of GST implementation and its business implications.

3.4 Objectives of the Study

The study was undertaken with the following objectives:

1. To examine the level of GST awareness among Small and Medium Enterprises.
2. To analyse the influence of GST awareness on GST compliance.
3. To evaluate the impact of GST compliance on business performance.
4. To examine the influence of digital GST practices on taxpayer satisfaction.
5. To analyse the influence of GST awareness on perceived GST effectiveness.

3.5 Research Hypotheses

The following hypotheses were formulated and tested:

H₁: GST Awareness has a significant positive effect on GST Compliance.

H₂: GST Compliance has a significant positive effect on Business Performance.

H₃: Digital GST Practices have a significant positive effect on Taxpayer Satisfaction.

H₄: GST Awareness has a significant positive effect on GST Effectiveness.

3.6 Sources of Data

The study utilised both primary and secondary sources of data.

Primary Data

Primary data were collected using a structured questionnaire administered to owners, managers, accountants, and GST practitioners associated with Small and Medium Enterprises.

Secondary Data

Secondary information was obtained from government reports, GST Council publications, research articles, books, annual reports, policy documents, and scholarly journals relating to GST implementation and SME taxation.

3.7 Target Population

The target population comprised registered Small and Medium Enterprises (SMEs) operating across manufacturing, trading, and service sectors. Respondents included business owners, proprietors, finance managers, accountants, and individuals directly responsible for GST compliance within their respective enterprises.

3.8 Sampling Technique

A purposive sampling technique was adopted to select respondents possessing adequate knowledge and practical experience in GST compliance. This approach ensured that responses were obtained from individuals capable of providing reliable information relevant to the research objectives.

3.9 Sample Size

The study considered a total sample of 200 SME respondents. The selected sample was considered adequate for conducting descriptive statistics, reliability analysis, correlation analysis, and regression analysis while maintaining acceptable statistical power.

3.10 Research Instrument

Data were collected using a structured questionnaire consisting of two sections.

Section A: Demographic Information

- ✍ Gender
- ✍ Age
- ✍ Educational Qualification
- ✍ Business Experience
- ✍ Business Type
- ✍ Annual Turnover
- ✍ GST Registration Status
- ✍ Business Sector

Section B: Measurement of Research Constructs

The questionnaire measured the following constructs:

- ✍ GST Awareness (4 items)
- ✍ GST Compliance (4 items)
- ✍ Digital GST Practices (4 items)
- ✍ Business Performance (4 items)
- ✍ Taxpayer Satisfaction
- ✍ GST Effectiveness

Responses were recorded using a **five-point Likert scale**, where:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

3.11 Variables of the Study

Independent Variables

- ☞ GST Awareness
- ☞ GST Compliance
- ☞ Digital GST Practices

Dependent Variables

- ☞ Business Performance
- ☞ Taxpayer Satisfaction
- ☞ GST Effectiveness

3.12 Reliability of the Instrument

The internal consistency of the research instrument was evaluated using Cronbach's Alpha. All constructs recorded reliability coefficients above the recommended threshold of 0.70, indicating satisfactory reliability. The overall instrument achieved a Cronbach's Alpha value exceeding 0.90, confirming excellent internal consistency and supporting the suitability of the questionnaire for further statistical analysis.

3.13 Statistical Tools Used

The collected data were coded, tabulated, and analysed using statistical software. The following analytical techniques were employed:

- ☞ Frequency and Percentage Analysis
- ☞ Descriptive Statistics (Mean and Standard Deviation)
- ☞ Cronbach's Alpha Reliability Analysis
- ☞ Pearson Correlation Analysis
- ☞ Simple Linear Regression Analysis
- ☞ Analysis of Variance (ANOVA)
- ☞ Regression Coefficient Analysis
- ☞ Hypothesis Testing using p-values (5% significance level)

3.14 Conceptual Framework of the Study

The conceptual framework proposed that GST Awareness enhances GST Compliance and perceived GST Effectiveness, while GST Compliance improves Business Performance and Digital GST Practices enhance Taxpayer Satisfaction. The framework assumes that greater awareness and digital adoption contribute to better compliance behaviour, organisational performance, and positive perceptions regarding GST implementation.

Conceptual Relationships

GST Awareness → GST Compliance GST Awareness → GST Effectiveness GST Compliance → Business Performance Digital GST Practices → Taxpayer Satisfaction

3.15 Ethical Considerations

The study adhered to accepted ethical standards throughout the research process. Participation was voluntary, respondents were informed about the purpose of the study, and confidentiality

of the information provided was maintained. The collected data were used exclusively for academic and research purposes, and no personally identifiable information was disclosed.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATIONS

Table 4.1: Demographic Profile of Respondents (n = 200)

Variable	Category	Frequency	Percentage (%)
Gender	Male	93	46.5
	Female	107	53.5
Age	Below 30	57	28.5
	31–40	45	22.5
	41–50	49	24.5
	Above 50	49	24.5
Education	PUC	61	30.5
	Graduate	48	24.0
	Postgraduate	41	20.5
	Professional	50	25.0
Business Type	Manufacturing	56	28.0
	Trading	58	29.0
	Service	86	43.0
Annual Turnover	Below ₹50 Lakhs	62	31.0
	₹50 Lakhs–₹2 Crores	71	35.5
	Above ₹2 Crores	67	33.5
GST Registration	Regular	164	82.0
	Composition	36	18.0
Business Sector	Engineering	41	20.5
	IT	39	19.5
	Food	34	17.0
	Retail	33	16.5
	Textile	29	14.5
	Healthcare	24	12.0

Source: Primary Survey Data (n = 200).

The respondent profile demonstrates that the study includes SMEs from a broad cross-section of industries and organizational characteristics. Female-owned or managed enterprises constitute 53.5% of the sample, while service-sector firms represent the largest business category (43.0%), reflecting the growing importance of service enterprises in the SME ecosystem. Most respondents are registered under the regular GST scheme (82.0%), indicating substantial exposure to routine GST compliance requirements. The turnover distribution is balanced across the three business-size categories, enhancing the generalizability of the findings. Respondents also represent diverse educational backgrounds and sectors, reducing demographic bias. Overall, the sample is sufficiently heterogeneous to examine relationships among GST awareness, compliance behaviour, digital practices, taxpayer satisfaction, and business performance.

Table 4.2: Descriptive Statistics of Major Constructs

Construct	Mean	Standard Deviation
GST Awareness	3.48	0.91
GST Compliance	3.49	0.96
Digital GST Practices	3.49	0.89
Business Performance	3.42	0.88

Source: Computed from the dataset (n = 200).

Table 4.2 presents the descriptive statistics of the major constructs considered in the study. The mean scores indicate that the respondents possessed a moderately high level of GST awareness (Mean = 3.483, SD = 0.907), GST compliance (Mean = 3.485, SD = 0.959), and digital GST practices (Mean = 3.486, SD = 0.891), suggesting a favourable perception and adoption of GST-related procedures among SMEs. Business Performance recorded a mean score of 3.421 (SD = 0.877), indicating that GST compliance has contributed positively to organisational performance, although there remains scope for further improvement. Taxpayer Satisfaction (Mean = 3.805, SD = 0.939) registered the highest average score, reflecting respondents' overall satisfaction with digital GST services and compliance mechanisms. Similarly, GST Effectiveness (Mean = 3.545, SD = 0.890) demonstrates that SMEs generally perceive the GST system as transparent and effective. The standard deviation values for all constructs are below one, indicating moderate variability and consistency in respondents' opinions. Overall, the descriptive statistics suggest a positive outlook towards GST implementation and provide a sound basis for conducting subsequent correlation and regression analyses.

Table 4.3: Reliability Analysis of the Research Constructs

Construct	Number of Items	Cronbach's Alpha	Reliability Status
GST Awareness	4	0.889	Excellent
GST Compliance	4	0.901	Excellent
Digital GST Practices	4	0.874	Good
Business Performance	4	0.887	Good
Overall Research Instrument	16	0.912	Excellent

Decision Criterion: Cronbach's Alpha ≥ 0.70 indicates acceptable internal consistency.

Source: Computed from the Primary Survey Data (n = 200).

Table 4.3 presents the reliability statistics of the measurement instrument using Cronbach's Alpha. The results indicate that all four constructs exceed the recommended threshold value of 0.70, confirming satisfactory internal consistency among the measurement items. GST Compliance records the highest reliability coefficient ($\alpha = 0.901$), followed by GST Awareness ($\alpha = 0.889$), Business Performance ($\alpha = 0.887$), and Digital GST Practices ($\alpha = 0.874$). The overall research instrument achieves a Cronbach's Alpha of **0.912**, demonstrating excellent reliability and indicating that the questionnaire consistently measures the intended constructs. These findings suggest that the collected responses are sufficiently reliable for conducting further inferential statistical analyses, including correlation and regression analysis. Therefore, the measurement instrument is considered statistically dependable for examining the relationships among GST awareness, compliance behaviour, digital practices, and business performance.

Table 4.4: Pearson Correlation Matrix of the Major Study Variables

Variables	1	2	3	4	5	6
1. GST Awareness	1.000					
2. GST Compliance	0.886	1.000				
3. Digital GST Practices	0.853	0.807	1.000			
4. Business Performance	0.808	0.830	0.813	1.000		
5. Taxpayer Satisfaction	0.750	0.767	0.799	0.794	1.000	
6. GST Effectiveness	0.775	0.803	0.815	0.875	0.832	1.000

Note: All correlation coefficients are statistically significant at $p < 0.001$.

Source: Computed from the Primary Survey Data (n = 200).

The Pearson correlation analysis indicates significant positive relationships among all study constructs. GST Awareness exhibits a strong association with GST Compliance ($r = 0.886$), while GST Compliance is strongly related to Business Performance ($r = 0.830$). Digital GST Practices demonstrate a substantial positive relationship with Taxpayer Satisfaction ($r = 0.799$). GST Effectiveness is highly correlated with Business Performance ($r = 0.875$), indicating that enterprises reporting better operational outcomes also perceive GST to be more effective. Since none of the correlation coefficients exceed 0.90, the results do not indicate severe multicollinearity. Overall, the findings support the conceptual framework that awareness, compliance, and digital adoption jointly contribute to improved business outcomes and favourable perceptions of GST.

Table 4.5: Model Summary: Effect of GST Awareness on GST Compliance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.886	0.784	0.783	0.306

Dependent Variable: GST Compliance

Predictor: GST Awareness

Source: Computed from Primary Survey Data (n = 200).

Table 4.5 presents the model summary for the regression analysis examining the influence of GST Awareness on GST Compliance. The correlation coefficient ($R = 0.886$) indicates a very strong positive relationship between the two variables. The coefficient of determination ($R^2 = 0.784$) reveals that GST Awareness explains **78.4%** of the variation in GST Compliance. The adjusted R^2 value (0.783) is almost identical to R^2 , suggesting excellent model stability and minimal overestimation. Furthermore, the relatively low standard error of estimate (0.306) indicates that the regression model predicts GST Compliance with a high degree of accuracy. Overall, the model demonstrates strong explanatory power and is appropriate for examining the proposed relationship.

Table 4.6: ANOVA for Regression Model: Effect of GST Awareness on GST Compliance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	67.852	1	67.852	720.307	0.000
Residual	18.648	198	0.094		
Total	86.500	199			

Source: Computed from Primary Survey Data (n = 200).

The ANOVA results confirm that the regression model is statistically significant. The regression sum of squares (67.852) substantially exceeds the residual sum of squares (18.648), indicating that GST Awareness accounts for a large proportion of the variability in GST Compliance. The F-statistic of 720.307 is highly significant ($p < 0.001$), demonstrating that the regression model provides a significantly better fit than a model without predictors. Accordingly, GST Awareness is a statistically significant predictor of GST Compliance among SMEs. The findings support the suitability of the regression model for hypothesis testing and indicate that awareness plays an important role in improving compliance behaviour.

Table 4.7: Regression Coefficients: Effect of GST Awareness on GST Compliance

Predictor	Unstandardized Coefficient (B)	Std. Error	Standardized Beta	t-value	Sig.	Tolerance	VIF
Constant	0.222	0.126	—	1.766	0.079	—	—
GST Awareness	0.937	0.035	0.886	26.839	0.000	1.000	1.000

Source: Computed from Primary Survey Data (n = 200).

The regression coefficients indicate that GST Awareness has a statistically significant and positive effect on GST Compliance. The unstandardized coefficient ($B = 0.937$) suggests that a one-unit increase in GST Awareness is associated with an average increase of 0.937 units in GST Compliance. The standardized beta coefficient ($\beta = 0.886$) reflects a very strong positive influence of awareness on compliance. The predictor is highly significant ($t = 26.839$, $p < 0.001$), whereas the intercept is not statistically significant ($p = 0.079$), which does not affect the interpretation of the predictor. The tolerance and VIF values indicate no multicollinearity concerns. These findings demonstrate that improving taxpayer awareness can substantially strengthen GST compliance among SMEs.

Hence, **H1:** *GST Awareness has a significant positive effect on GST Compliance.* is **Accepted** ($p < 0.001$).

Table 4.8: Model Summary: Effect of GST Compliance on Business Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.830	0.688	0.687	0.492

Dependent Variable: Business Performance

Predictor: GST Compliance

Source: Computed by the Author from Primary Survey Data (n = 200).

Table 4.8 presents the model summary examining the effect of GST Compliance on Business Performance. The correlation coefficient ($R = 0.830$) indicates a strong positive relationship between the predictor and the dependent variable. The coefficient of determination ($R^2 = 0.688$) implies that 68.8% of the variation in Business Performance is explained by GST Compliance. The adjusted R^2 (0.687) is almost identical to R^2 , confirming the stability of the regression model. The standard error of estimate (0.492) indicates satisfactory predictive accuracy. Overall, the model demonstrates substantial explanatory power and suggests that higher GST compliance contributes significantly to improvements in operational efficiency and financial performance among SMEs.

Table 4.9: ANOVA: Effect of GST Compliance on Business Performance

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	106.61	1	106.61	437.29	0.000
Residual	48.27	198	0.244		
Total	154.88	199			

Source: Computed by the Author from Primary Survey Data (n = 200).

The ANOVA results confirm that the regression model is statistically significant. The regression sum of squares is considerably larger than the residual sum of squares, indicating that GST Compliance explains a substantial proportion of the variability in Business Performance. The computed F-statistic (437.29) is highly significant ($p < 0.001$), demonstrating that the regression equation provides a significantly better fit than a model without predictors. These findings indicate that GST Compliance is a statistically meaningful determinant of Business Performance and justify proceeding with coefficient interpretation.

Table 4.10: Regression Coefficients: Effect of GST Compliance on Business Performance

Predictor	B	Std. Error	Beta	t	Sig.
Constant	0.777	0.131	—	5.93	0.000
GST Compliance	0.759	0.036	0.830	20.91	0.000

Source: Computed by the Author from Survey Data (n = 200).

The regression coefficients indicate that GST Compliance has a significant positive influence on Business Performance. The unstandardized coefficient ($B = 0.759$) shows that a one-unit increase in GST Compliance is associated with a 0.759-unit increase in Business Performance. The standardized beta coefficient ($\beta = 0.830$) demonstrates a strong positive effect. The predictor is statistically significant ($t = 20.91$, $p < 0.001$), confirming that GST Compliance is an important explanatory variable. These findings suggest that enterprises maintaining timely tax filing, accurate reporting, and regulatory compliance are more likely to experience stronger business outcomes.

Hence, **H2: GST Compliance significantly improves Business Performance** is **Accepted**.

Table 4.11: Model Summary: Effect of Digital GST Practices on Taxpayer Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.799	0.638	0.637	0.566

Dependent Variable: Taxpayer Satisfaction

Predictor: Digital GST Practices

Source: Computed by the Author from Primary Survey Data (n = 200).

The model summary reveals a strong positive relationship between Digital GST Practices and Taxpayer Satisfaction. The regression model explains 63.8% of the total variation in taxpayer satisfaction ($R^2 = 0.638$), indicating substantial explanatory power. The adjusted R^2 closely matches the R^2 value, demonstrating model stability. The results indicate that digital initiatives such as online return filing, e-invoicing, and electronic payment systems play a significant role in improving the overall taxpayer experience. Consequently, continued investment in digital GST infrastructure is likely to increase user satisfaction and encourage voluntary compliance.

Table 4.12: ANOVA: Effect of Digital GST Practices on Taxpayer Satisfaction

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	112.94	1	112.94	349.51	0.000
Residual	64.00	198	0.323		
Total	176.94	199			

Source: Computed by the Author from Primary Survey Data (n = 200).

The ANOVA confirms that the regression model is statistically significant. The F-statistic (349.51) is significant at $p < 0.001$, indicating that Digital GST Practices provide a meaningful explanation of the variation in Taxpayer Satisfaction. The large regression sum of squares relative to the residual sum of squares demonstrates that the predictor contributes substantially to the model. The findings validate the suitability of the regression equation for testing the proposed hypothesis.

Table 4.13: Regression Coefficients: Effect of Digital GST Practices on Taxpayer Satisfaction

Predictor	B	Std. Error	Beta	t	Sig.
Constant	0.869	0.162	—	5.36	0.000
Digital GST Practices	0.842	0.045	0.799	18.70	0.000

Source: Computed by the Author from Primary Survey Data (n = 200).

The regression coefficients demonstrate that Digital GST Practices significantly influence Taxpayer Satisfaction. The positive regression coefficient ($B = 0.842$) indicates that improved adoption of digital GST services increases taxpayer satisfaction. The standardized beta coefficient ($\beta = 0.799$) confirms a strong positive relationship, while the t-value (18.70) and p-value (< 0.001) establish statistical significance. These results suggest that digital transformation within the GST framework enhances convenience, transparency, and service quality, thereby improving the experience of SME taxpayers.

Hence, **H3: Digital GST Practices significantly influence Taxpayer Satisfaction is Accepted.**

Table 4.14: Model Summary: Effect of GST Awareness on GST Effectiveness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.775	0.600	0.598	0.565

Dependent Variable: GST Effectiveness

Predictor: GST Awareness

Source: Computed by the Author from Primary Survey Data (n = 200).

Table 4.14 presents the model summary assessing the influence of GST Awareness on GST Effectiveness. The correlation coefficient ($R = 0.775$) indicates a strong positive relationship between the two variables. The coefficient of determination ($R^2 = 0.600$) shows that GST Awareness explains **60.0%** of the variation in perceived GST Effectiveness. The adjusted R^2 value (0.598) is very close to the R^2 value, indicating that the regression model is stable and reliable. The standard error of estimate (0.565) suggests satisfactory predictive accuracy. These findings imply that SMEs with higher awareness of GST provisions, filing requirements, and compliance procedures are more likely to perceive the GST system as effective, transparent, and beneficial for business operations.

Table 4.15: ANOVA: Effect of GST Awareness on GST Effectiveness

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	94.95	1	94.95	297.54	0.000
Residual	63.20	198	0.319		
Total	158.15	199			

Source: Computed by the Author from Primary Survey Data (n = 200).

The ANOVA results demonstrate that the regression model is statistically significant. The regression sum of squares (94.95) is substantially higher than the residual sum of squares (63.20), indicating that GST Awareness accounts for a considerable proportion of the variability in GST Effectiveness. The F-statistic of **297.54** is highly significant ($p < 0.001$), confirming that the model provides a significantly better fit than a model without predictors. These findings indicate that GST Awareness is a statistically significant determinant of GST Effectiveness and that the regression equation is appropriate for testing the proposed hypothesis.

Table 4.16: Regression Coefficients: Effect of GST Awareness on GST Effectiveness

Predictor	B	Std. Error	Beta	t	Sig.
Constant	0.896	0.159	—	5.65	0.000
GST Awareness	0.761	0.044	0.775	17.25	0.000

Source: Computed by the Author from Primary Survey Data (n = 200).

The regression coefficients reveal that GST Awareness exerts a statistically significant positive effect on GST Effectiveness. The unstandardized coefficient ($B = 0.761$) indicates that a one-unit increase in GST Awareness leads to an estimated increase of 0.761 units in GST Effectiveness. The standardized beta coefficient ($\beta = 0.775$) reflects a strong positive influence of awareness on effectiveness. The predictor is highly significant ($t = 17.25$, $p < 0.001$), confirming that GST Awareness is an important explanatory variable. These findings suggest that strengthening awareness through training programmes, taxpayer education, and simplified guidance can significantly improve perceptions regarding the effectiveness of the GST system among SMEs.

Hence, **H4: GST Awareness has a significant positive effect on GST Effectiveness is Accepted.**

Table 4.17: Summary of Hypothesis Testing

Hypothesis	Statement	Statistical Test	p-value	Decision
H1	GST Awareness has a significant positive effect on GST Compliance.	Simple Linear Regression	<0.001	Accepted
H2	GST Compliance significantly improves Business Performance.	Simple Linear Regression	<0.001	Accepted
H3	Digital GST Practices significantly influence Taxpayer Satisfaction.	Simple Linear Regression	<0.001	Accepted
H4	GST Awareness has a significant positive effect on GST Effectiveness.	Simple Linear Regression	<0.001	Accepted

Source: Compiled by the Author from Regression Analysis Results.

Table 4.17 summarises the outcomes of hypothesis testing based on the regression analyses. All four hypotheses are statistically supported, as each regression model produced highly

significant results ($p < 0.001$). GST Awareness emerged as a key determinant of both GST Compliance and GST Effectiveness, highlighting the importance of taxpayer education and knowledge dissemination. GST Compliance significantly influenced Business Performance, indicating that adherence to GST regulations contributes positively to organisational efficiency and financial outcomes. Furthermore, Digital GST Practices demonstrated a significant positive impact on Taxpayer Satisfaction, reflecting the benefits of technology-enabled tax administration. Collectively, these findings support the conceptual framework of the study and demonstrate that awareness, compliance, and digitalisation are important drivers of successful GST implementation among SMEs.

CHAPTER 5: FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Major Findings of the Study

The statistical analyses provide comprehensive evidence regarding the influence of GST awareness, compliance behaviour, digital GST practices, and taxpayer satisfaction on the overall effectiveness of the GST system among Small and Medium Enterprises (SMEs). The major findings of the study are presented below.

1. SMEs demonstrated a satisfactory level of GST awareness: The descriptive analysis indicated that the respondents possessed a moderate to high level of awareness regarding GST provisions, return filing procedures, input tax credit mechanisms, and statutory compliance requirements. This suggests that continuous government awareness initiatives and digital information platforms have contributed positively to taxpayer knowledge.

2. GST awareness significantly improved GST compliance: The regression analysis established a strong positive relationship between GST awareness and GST compliance. Enterprises with better understanding of GST regulations were more likely to file returns on time, maintain proper documentation, and comply with statutory requirements. The findings indicate that taxpayer education is one of the strongest determinants of voluntary compliance.

3. GST compliance positively influenced business performance: The empirical results revealed that compliant enterprises reported better operational efficiency, improved financial discipline, and enhanced business performance. Compliance not only reduced regulatory risks but also improved organisational credibility and facilitated smoother business transactions.

4. Digital GST practices significantly enhanced taxpayer satisfaction: The adoption of digital GST facilities, including e-filing, online payment systems, and electronic invoicing, significantly improved taxpayer satisfaction. Digitalisation reduced procedural complexity, improved accessibility, and enabled faster completion of compliance-related activities.

5. GST awareness significantly influenced perceived GST effectiveness: The analysis demonstrated that respondents with greater awareness of GST regulations perceived the GST system as more transparent, efficient, and beneficial. This finding highlights the importance of knowledge dissemination in improving public confidence in tax reforms.

6. All four research hypotheses were statistically supported: The regression analyses confirmed that all proposed hypotheses were accepted at the 1 per cent significance level. This indicates that the conceptual framework developed for the study is empirically supported by the data and that the identified variables contribute significantly to GST implementation outcomes.

7. The research instrument demonstrated high reliability: Cronbach's Alpha values for all constructs exceeded the recommended threshold, indicating strong internal consistency among the measurement items. This confirms the reliability of the questionnaire and supports the validity of the subsequent statistical analyses.

8. Strong positive relationships existed among the major constructs: Correlation analysis revealed statistically significant positive associations among GST awareness, compliance, digital practices, business performance, taxpayer satisfaction, and GST effectiveness. These findings indicate that improvements in one construct are generally associated with improvements in the others.

9. GST compliance contributed to improved business discipline: Respondents indicated that regular compliance encouraged systematic financial record maintenance, timely reporting, and improved managerial control. Compliance therefore functioned not only as a legal requirement but also as an important management practice.

10. Digital transformation emerged as an important enabler of GST implementation: The study indicates that continued investment in digital infrastructure, taxpayer support services, and simplified online systems can further improve compliance, satisfaction, and overall GST effectiveness among SMEs.

5.2 Recommendations

Based on the empirical findings, the following recommendations are proposed to strengthen GST implementation among SMEs.

1. Strengthen taxpayer awareness programmes: Government agencies should organise regular awareness campaigns, workshops, webinars, and multilingual educational programmes to improve taxpayers' understanding of GST provisions and recent amendments. Continuous education will contribute to higher voluntary compliance.

2. Simplify GST compliance procedures: Further simplification of return filing procedures, documentation requirements, and compliance processes would reduce the administrative burden on SMEs. User-friendly compliance systems can improve both efficiency and taxpayer satisfaction.

3. Expand digital support services: Tax authorities should continue enhancing digital GST infrastructure by improving portal performance, simplifying user interfaces, and strengthening online grievance redressal mechanisms. These measures will encourage greater digital adoption.

4. Provide specialised support for small enterprises: Micro and small enterprises often experience greater compliance challenges due to limited financial and technical resources. Tailored advisory services, sector-specific guidance, and simplified compliance assistance can improve their participation in the GST system.

5. Encourage continuous professional training: Business owners, accountants, tax practitioners, and finance managers should receive periodic professional training on GST amendments, digital filing systems, and compliance requirements. Continuous skill development will improve reporting accuracy.

6. Promote technology-driven compliance management: SMEs should adopt integrated accounting software, cloud-based record management systems, and automated GST compliance tools to reduce human error and improve operational efficiency.

7. Strengthen policy feedback mechanisms: Tax authorities should establish structured consultation mechanisms with SMEs to identify practical implementation issues and incorporate stakeholder feedback into future GST policy reforms. Collaborative policy development will enhance trust and improve long-term compliance.

CHAPTER 6: CONCLUSION AND FUTURE SCOPE FOR RESEARCH

6.1 Conclusion

The implementation of the Goods and Services Tax (GST) represents one of the most significant indirect tax reforms introduced in India with the objective of creating a unified national market, improving tax transparency, and promoting ease of doing business. The present study examined the influence of GST awareness, GST compliance, digital GST practices, business performance, taxpayer satisfaction, and perceived GST effectiveness among Small and Medium Enterprises (SMEs). The empirical findings indicate that GST awareness plays a pivotal role in strengthening compliance behaviour, while higher compliance contributes positively to organisational performance. The study further demonstrates that digital GST initiatives have significantly enhanced taxpayer satisfaction by simplifying return filing, improving transparency, and reducing procedural complexity. The statistical analyses also confirmed that all proposed hypotheses were supported, indicating strong positive relationships among the major study variables. These findings suggest that awareness, compliance, and digitalisation collectively contribute to improving the effectiveness of GST implementation within the SME sector.

The study also highlights the managerial and policy implications of GST implementation. From a managerial perspective, systematic GST compliance encourages better financial discipline, accurate record maintenance, and improved operational efficiency. From a policy perspective, continuous taxpayer education, technological advancement, and simplification of compliance procedures remain essential for sustaining voluntary compliance and enhancing confidence in the GST system. Although SMEs continue to experience certain operational challenges associated with changing regulations and procedural requirements, the overall evidence suggests that GST has positively influenced business governance and taxation practices. Therefore, strengthening digital infrastructure, expanding taxpayer support mechanisms, and encouraging collaborative policy development between government authorities and business enterprises will further improve the effectiveness of GST administration and contribute to the long-term growth of the SME sector.

6.2 Future Scope for Research

The present study provides several opportunities for future research. Subsequent investigations may extend the analysis by employing larger and more geographically diverse samples covering multiple states or regions of India to improve the generalisability of the findings. Future studies may also compare GST implementation across different industrial sectors, enterprise sizes, or ownership structures to identify sector-specific compliance challenges and opportunities. Longitudinal research examining changes in GST awareness, compliance behaviour, and business performance over time would provide deeper insights into the long-term impact of GST reforms. Researchers may further incorporate advanced analytical

approaches such as Structural Equation Modelling (SEM), mediation analysis, moderation analysis, or multi-group comparisons to examine more complex causal relationships among taxation, digital transformation, organisational performance, and taxpayer behaviour. Comparative international studies evaluating GST or Value Added Tax (VAT) systems across different countries would also contribute to the broader literature on indirect taxation and public finance.

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