

Impact of GST on Operational Efficiency and Financial Performance of MSMEs in Bihar, India: An Empirical Study

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Abstract

The Goods and Services Tax (GST) Act was implemented in India w.e.f. 1st July, 2017 by subsuming approximately 17 types of fragmented indirect taxes with aim to introduce 'one nation one tax' system, 'ease tax compliance' and provide 'ease of doing business' environment to the business entities. The primary objective of this study is to examine the impact of GST implementation on the operational efficiency and financial performance of MSMEs in Bihar through the lens of Institutional Theory Framework (ITF). However, the implementation challenges, technology adoption and government support are incorporated as the principal explanatory constructs influencing operational efficiency and financial performance, whereas demographic variables are used only to describe the characteristics of the sample collected for the study. Total 573 data were collected from MSME units working in different parts of Bihar using multi-stage sampling. Structural Equation Modelling (SEM) analysis was done through SmartPLS-4. The findings suggest that implementation of GST had a positive impact on the operational efficiency and financial performance of MSMEs in Bihar, except some difficulties faced during the transition stage. Training programmes, webinars, dissemination of information through government portals/websites, GST Suvidha-Kendras, boundary-less interstate trade and export, etc. have improved ease of doing business among MSMEs. Policymakers should focus on simplifying compliance procedures and avoid frequent regulatory changes so that uncertainty and administrative burden on MSMEs can be minimised and sustained long-term growth as well as financial stability can be extended to them.

Keywords: Financial Performance, Government Support, GST, Implementation Challenges, MSME, Operational Efficiency.

Introduction

Micro, Small and Medium Enterprises (MSMEs) are termed as the engine for growth of India because they contribute around 30 per cent to Gross Domestic Product (GDP), 45 per cent to exports, 95 per cent to the total number of industrial enterprises, 45 per cent to the total industrial production and are also the biggest employment generator at low investment (1–5). Bihar has 40.32 lakh registered MSMEs, out of which 10.41 lakh are owned by women (6–8). The Goods and Services Tax (GST), implemented w.e.f. 1st July 2017 by subsuming multiple indirect taxes into a single unified tax framework for reducing cascading effects of taxes and improving tax efficiency (9). Despite its intended benefits, MSMEs continue to face significant implementation challenges, like compliance complexity, regulatory ambiguity, input tax credit restrictions, cash-flow constraints, limited technological readiness and increased compliance costs, particularly among micro and small enterprises operating in rural and semi-

urban regions (10–16). Bihar has considerable MSME potential in agro-processing, textiles, leather, tourism, pharmaceuticals, information technology and other manufacturing sectors (17). Several geographical indicator Tag (GI Tag) products, like Shahi Litchi, Mithila Makhana, Bhagalpur Silk and Madhubani Painting, etc., provide additional opportunities for MSME development and regional economic growth (18, 19). JEEVIKA and the Mukhyamantri Mahila Rozgar Yojana have further strengthened entrepreneurship among women (20, 21). Nevertheless, despite positive trends in GST collections and available ingredients for MSME development, Bihar continues to lag behind leading Indian states in GST revenue mobilisation and MSME formalisation. Existing studies have largely examined the impact of GST implementation either at the national level or in relatively industrialised states, but studies at the Bihar level remain limited. Therefore, the objective

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of the study is to address this gap by examining how GST implementation challenges, technology adoption and government support influence the operational efficiency and financial performance of MSMEs in Bihar. The study addresses the following research questions:

RQ1: How do GST implementation challenges influence operational efficiency and financial performance of MSMEs?

RQ2: What is the effect of technology adoption on operational efficiency and financial performance of MSMEs?

RQ3: How does government support influence operational efficiency and financial performance of MSMEs?

Theoretical Background and Hypothesis Development

The proposed conceptual model is grounded on the Institutional Theory Framework (ITF), that explain how organisational behaviour is affected by external institutional pressures (22). In this study, Government Support (GS) represents coercive institutional pressure, while Technology Adoption (TA) reflects mimetic and normative pressures since MSMEs emulate successful practices and professional standards. In contrast, Implementation Challenges (IC) represent internal constraints that hinder the ability of MSMEs to respond effectively to these institutional constraints. MSMEs who successfully overcome these constraints can improve their operational efficiency as well as financial performance through better resource utilisation, cost efficiency and competitiveness (23). Accordingly, this study extends Institutional Theory by explaining how GST-induced institutional pressures influence the operational efficiency and financial performance of MSMEs in Bihar.

GST Implementation Challenges (IC)

GST unified the indirect tax system in India and promoted market formalisation (24). However, its implementation also imposed substantial compliance challenges on MSMEs. Previous studies reported increased compliance costs, procedural complexity, delayed refunds, technological barriers, difficulties in claiming Input Tax Credit (ITC), greater dependence on tax consultants, etc. and these factors increased the compliance burden on small firms (25–28). From the Institutional Theory perspective, GST Implementation Challenges (IC) arise from coercive regulatory

pressures associated with mandatory GST compliance and may have an impact on the operational efficiency of MSMEs. To investigate these aspects, the following is hypothesised:

H1: GST implementation challenges have a significant impact on operational efficiency among MSMEs.

Technology Adoption (TA)

Technology Adoption (TA) is essential for effective GST compliance because compliance procedures under the GST regime are online. However, inadequate digital infrastructure, limited IT skills, complex return filing procedures and low digital literacy continue to hinder technology adoption among MSMEs, especially in rural and semi-urban areas (29–31). From the lens of Institutional Theory, technology adoption is a mimetic and normative response where adoption of GST accounting/compliance software, electronic compliance mechanisms, etc. are pre-mandated to improve operational efficiency among MSMEs, for which the hypothesis is as under:

H2: Technology adoption has a significant impact on operational efficiency among MSMEs.

Government Support (GS)

Government Support (GS) plays a critical role in facilitating GST adoption through training programmes, awareness campaigns and technical assistance. Earlier studies indicate that inadequate preparedness and technical issues within the GST system increased compliance burden during the initial implementation phase, highlighting the need for continuous support from government (32, 33). Within the Institutional Theory framework, government support represents normative institutional pressure that promotes digital readiness through training, support services and digital facilitation to improve organisational preparedness for GST adoption. Therefore, investigation of the status of government support for effective implementation of GST and its impact on the operational efficiency of MSMEs can be done through the following hypothesis:

H3: Government support has a significant impact on operational efficiency among MSMEs.

Operational Efficiency (OE)

Status of Operational Efficiency (OE) reflects the ability of MSMEs to optimise GST processes, reduce costs and improve productivity. While GST has improved efficiency among organised firms, compliance complexity and procedural

requirements continue to increase administrative costs and adversely affect business performance (34–37). Financial Performance (FP) represents the outcome to measure operational efficiency of MEMEs in the GST regime. Institutional Theory suggests that organisations responding effectively to institutional pressures achieve higher operational efficiency, which subsequently improves financial performance through better resource utilisation, productivity and cost

reduction. Operational efficiency can act as a key variable to link implementation challenges, technology adoption, as well as government support with financial performance; thus, the following is hypothesised:

H4: Operational efficiency has a significant impact on the financial performance of MSMEs.

The hypothesis-based conceptual framework of the study may be seen in Figure 1.

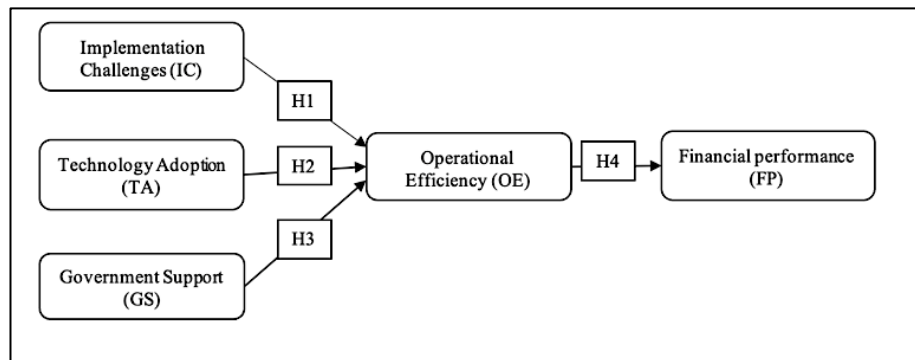


Figure 1: Conceptual Framework of the Study

Methodology

The study focused on the status of the impact of goods and services tax on operational efficiency and financial performance of MSMEs operating in Bihar state. The population for this study is the owners/representatives of MSMEs working in Bihar state. The study used a multi-stage sampling design, first employing cluster sampling by physically dividing Bihar state into four zones/clusters, north west, north east, south west and south east and then using simple random sampling for selection of districts among the clusters, succeeded by selection of MSME units from those selected districts. Saran (25°46'39.8"N, 84°44'33.2"E), Siwan (26°13'31.8"N, 84°21'36.3"E), West Champaran (26°48'12.5"N, 84°31'11.4"E), Muzaffarpur (26°07'25.1"N, 85°22'43.7"E), Sita marhi (26°33'48.7"N, 85°31'18.7"E), Motihari (26°37'54.2"N, 84°53'59.1"E) and Vaishali (25°41'47.6"N, 85°14'24.2"E) district were selected from north west zone, whereas Darbhanga (26°10'48.6"N, 85°52'37.6"E), Kishanganj (26°06'13.4"N, 87°57'11.5"E), Purnea (25°38'46.1"N, 87°08'29.9"E) and Begusarai (25°33'27.4"N, 86°07'41.8"E) were selected from north east zone. Similarly, Patna (25°36'36.0"N, 85°08'08.9"E), Ara (25°33'57.7"N, 84°40'00.3"E), Sasaram (24°57'13.6"N, 84°00'55.4"E), Gaya (24°47'21.2"N, 85°00'24.4"E), Arwal (25.233981995545143, 84.6549764

4666245) and Jehanabad (25°12'55.5"N, 84°59'24.8"E) were selected from south west zone whereas Bhagalpur (25°24'12.0"N, 86°51'49.0"E), Munger (25°22'16.5"N, 86°28'24.7"E), Banka (24°52'35.1"N, 86°55'13.2"E) and Nalanda (25°01'41.7"N, 85°25'11.8"E) were selected from south east zone. These research sites, along with approximate GPS coordinates shown in the bracket covers adequate geographical representation of Bihar state. Figure 2 depicts the clusters highlighted in different colours and districts within the cluster are also marked with star. The selected sample using the above methods for collection of primary data is more representative. A structured questionnaire translating the objective of the study in simple and plain language (English and Hindi) using a five-point Likert scale was prepared. Apart from this, some questions related to demographic information were also included in the questionnaire. A total of 1000 MSME units were selected from different parts of Bihar for this survey and 604 responses were received. 31 responses were dropped due to insufficient information and 573 responses were selected for this quantitative research. The data collection period was from January 2025 to June 2025. Operational efficiency and financial performance of the selected respondents have been taken on

subjective parameters because MSMEs are hesitant to reveal their exact financial figures publicly. Various studies based on subjective measures have been widely accepted (38–40). Various statistical tools and techniques were employed to analyse the data, which include

descriptive statistics, reliability analysis, regression analysis, exploratory factor analysis (EFA), correlation analysis, etc. Data analysis was done using Smart-PLS 4 for Partial Least Squares Structural Equation Modelling (PLS-SEM).

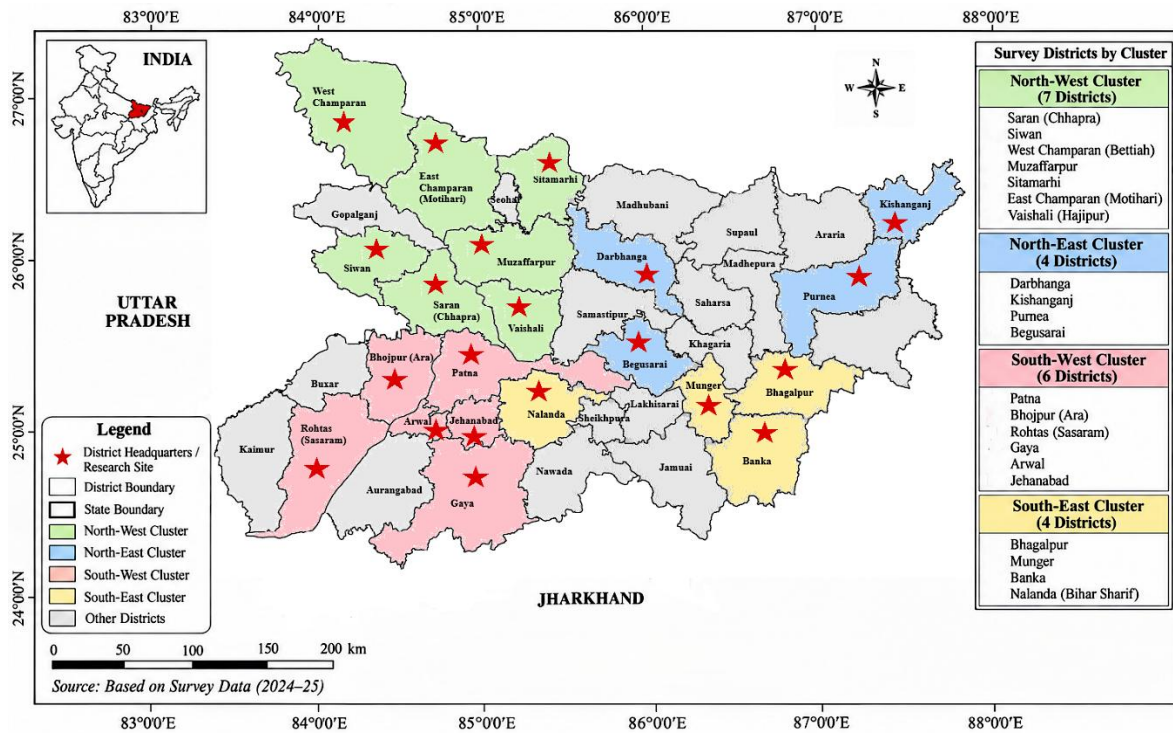


Figure 2: Political Map of Bihar showing the Survey Sites (Map not to Scale, Boundaries are for Illustrative Purposes Only)

Results and Discussion

Quantitative data on the socio-economic status of respondents were collected from the selected population. Figures 3A-3D present the demographic profile of the surveyed MSMEs. Out of the total respondents, 84 per cent are proprietary

firms and more than 90 per cent are micro enterprises. Approximately 90 per cent of MSMEs are owned by males and have a turnover of up to ₹10 crore.

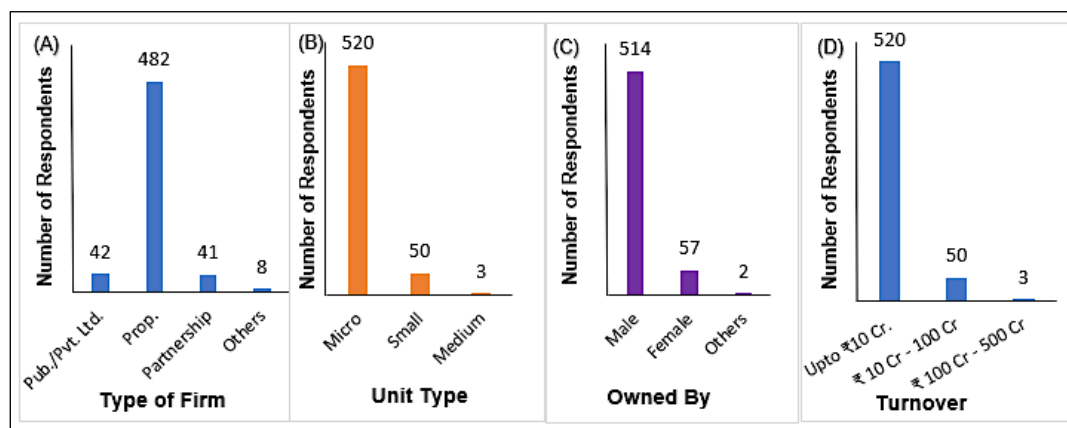


Figure 3: Graphical Representation of Demographic Primary Data. (A) Type of Firm, (B) Unit Type, (C) Owned by, (D) Turnover

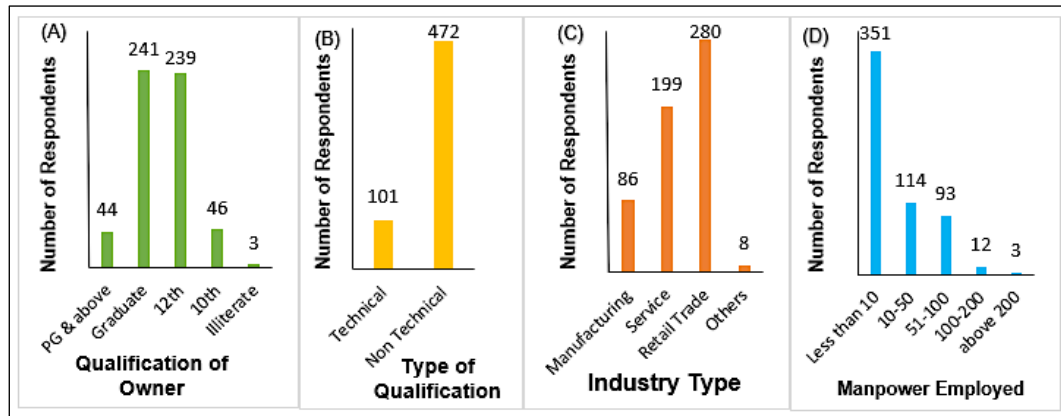


Figure 4: Graphical Representation of Demographic Primary Data. (A) Qualification of the Owner, (B) Type of Qualification, (C) Industry Type, (D) Manpower Employed

Further, Figures 4A-4D illustrate the educational and industrial profile of the surveyed MSMEs, where more than 42 per cent of business owners are graduates and above, followed by senior secondary with 41 percent. More than 82 per cent of respondents have non-technical qualifications. This indicates that the sample is predominantly composed of micro and small enterprises with relatively low turnover.

The reliability and validity of the study were assessed by evaluating Cronbach's Alpha (CA), average variance extracted (AVE) and composite reliability (CR) and results are shown in Table 1. As per the literature, the value of Cronbach's Alpha

≥ 0.70 shows good internal reliability (41). The results of Cronbach's Alpha of constructs range from 0.823 to 0.912 and show good reliability. Further, composite reliability (CR) > 0.70 confirms internal consistency and average variance extracted (AVE) > 0.50 indicates good convergent validity. The above results satisfied the threshold of AVE ≥ 0.5 and CR ≥ 0.7 (42). The outer loading of items should be > 0.7 for the strength of reliability of the construct and the study meets this threshold limit. Heterotrait-Monotrait Ratio measures discriminant validity between latent variables if values are ≤ 0.90 (43).

Table 1: Construct Reliability and Validity

Construct	Items	Weighted Mean	VIF	Outer loadings	CA	CR (rho_a)	CR (rho_c)	AVE	Reference
IC	IC1	2.98	2.186	0.862	0.823	0.842	0.862	0.631	(44)
	IC2	3.25	1.539	0.813					
	IC3	2.77	3.048	0.789					
TA	TA1	1.95	1.224	0.844	0.841	0.829	0.849	0.683	(45-47)
	TA2	4.64	3.126	0.801					
	TA3	4.92	3.446	0.776					
GS	GS1	4.37	1.501	0.871	0.860	0.848	0.868	0.732	(48, 49)
	GS2	4.59	1.476	0.825					
	GS3	4.23	2.218	0.788					
OE	OE1	4.66	2.471	0.859	0.881	0.866	0.886	0.694	(50)
	OE2	4.69	1.921	0.822					
	OE3	4.23	2.606	0.801					
	OE4	3.87	1.369	0.768					
FP	FP1	2.62	1.691	0.860	0.912	0.897	0.917	0.771	(51)
	FP2	4.41	2.567	0.834					
	FP3	4.4	2.349	0.815					
	FP4	2.38	1.745	0.792					
	FP5	4.64	2.859	0.776					
	FP6	4.86	3.356	0.745					

Note: IC = Implementation Challenges, TA = Technology Adoption, GS = Government Support, OE = Operational Efficiency, FP = Financial Performance, VIF = Variance Inflation Factor, CA = Cronbach's Alpha, CR (rho_a) = Dijkstra-Henseler's (2015) Composite Reliability Coefficient, CR (rho_c) = Composite Reliability (42), AVE = Average Variance Extracted.

Table 2 depicts the result of HTMT analysis and exhibits the discriminant validity among all constructs. The value of HTMT ranges from 0.654 to 0.866, which are below the recommended threshold of 0.90 (52). The result confirms the satisfactory discriminant validity among all constructs of the model for this study. Although the

highest HTMT value was observed between Operational Efficiency (OE) and Financial Performance (FP) [0.866], it remains within the acceptable limit and indicates that each construct is empirically distinct and measures a unique concept.

Table 2: Discriminant Validity of the Constructs -Heterotrait–Monotrait Ratio (HTMT)

Construct	IC	TA	GS	OE	FP
IC	-	-	-	-	-
TA	0.781	-	-	-	-
GS	0.745	0.815	-	-	-
OE	0.721	0.844	0.732	-	-
FP	0.654	0.762	0.684	0.866	-

Note: IC = Implementation Challenges, TA = Technology Adoption, GS = Government Support, OE = Operational Efficiency, FP = Financial Performance.

Figure 5 shows the result of the PLS-SEM bootstrap model with sampling of 5000 resamples, depicting a positive impact of technology adoption and government support mediated through operational efficiency on financial performance of

MSMEs. The R^2 values of the constructs OE and FP are 0.681 and 0.585, respectively and indicate that the PLS-SEM model predicts a significant impact on these variables.

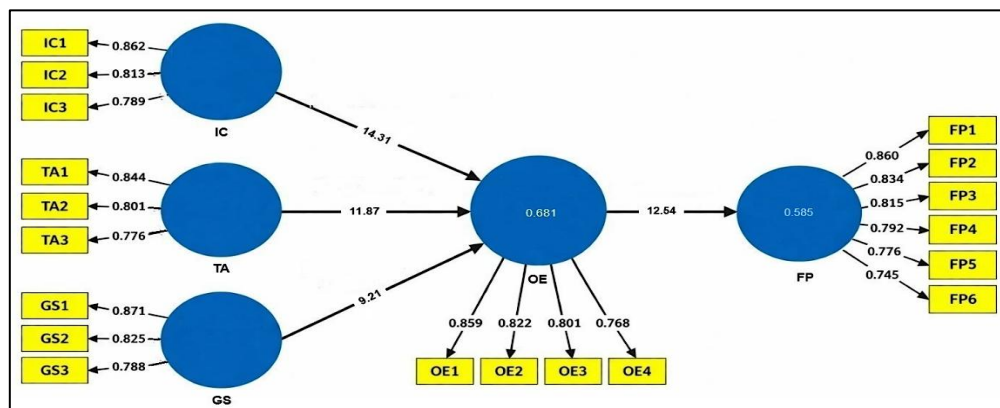


Figure 5: PLS-SEM Bootstrap Model Result

Note: IC = Implementation Challenges, TA = Technology Adoption, GS = Government Support, OE = Operational Efficiency, FP = Financial Performance.

Hypothesis Testing

Table 3 depicts the summarise result of hypotheses testing conducted using structural equation modelling (SEM), where path coefficients (β), t-values and p-values were evaluated to determine the significance and strength of

relationships among constructs. The findings reveal that all hypothesised relationships are statistically significant at the 1% level ($p < 0.001$), indicating strong empirical support for the proposed research model.

Table 3: Path coefficients, t-value, p-value and Hypothesis Testing

Hypothesis	Relationship	Path Coefficient (β)	t-value	p-value	Result
H1	IC $\rightarrow$ OE	-0.72	14.31	<0.001	Supported
H2	TA $\rightarrow$ OE	0.64	11.87	<0.001	Supported
H3	GS $\rightarrow$ OE	0.53	9.21	<0.001	Supported
H4	OE $\rightarrow$ FP	0.69	12.54	<0.001	Supported

Note: IC = Implementation Challenges, TA = Technology Adoption, GS = Government Support, OE = Operational Efficiency, FP = Financial Performance.

H1: Implementation Challenges (IC) → Operational Efficiency (OE)

GST implementation challenges had a significant negative impact on operational efficiency with $\beta = -0.72$, $t = 14.31$, $p < 0.001$ and thus supported hypothesis H1. The result suggests that challenges during implementation of GST had a substantial negative impact on operational efficiency. The significant negative path coefficient indicates a strong influence, implying that initial GST compliance requirements such as e-filing, digital invoicing, E-way bill generation, etc. under the GST regime had a negative impact on operational efficiency. The finding supports the earlier research where initial implementation challenges had a negative impact on the operational efficiency of MSMEs (53).

H2: Technology Adoption (TA) → Operational Efficiency (OE)

Results, $\beta = 0.64$, $t = 11.87$, $p < 0.001$, show that technology adoption had a significant positive effect on operational efficiency and thus support hypothesis H2. This indicates that MSMEs adopted digital tools in their day-to-day business operations, which positively influenced their business efficiency. The result confirms that technological integration in the GST system enhances overall business performance. The findings are supported by earlier research, which revealed that digital transformation has improved the efficiency of business entities despite challenges (54).

H3: Government Support (GS) → Operational Efficiency (OE)

The result shows that Government support had a positive and significant impact on operational efficiency with $\beta = 0.53$, $t = 9.21$, $p < 0.001$ and supported hypothesis H3. The finding highlighted the initiatives of the government to support MSMEs for effective implementation of GST. Although the effect is moderate compared to other constructs, it remains a crucial enabling factor. Approximately 88% of the population of Bihar lives in rural areas (Census 2011), where inadequate digital infrastructure, limited digital literacy and restricted access to GST facilitation centres create compliance issues for MSMEs working in rural and semi-urban areas. The study supports the earlier findings where financial literacy and entrepreneurial orientation enhanced MSME competitiveness in NTB Indonesia (55).

H4: Operational Efficiency (OE) → Financial Performance (FP)

Operational efficiency had a significant positive effect on financial performance with $\beta = 0.69$, $t = 12.54$, $p < 0.001$. The result suggests that improvement in operational efficiency due to other factors as discussed above translated directly into better financial outcomes, such as increased profitability, turnover, working capital and reduction of operating cost. The high coefficient indicates that operational efficiency is a key determinant for the financial success of MSMEs in the GST regime.

Findings of the Study

As per the above results and discussions, the hypotheses H1 to H4 are supported. The results validated the proposed conceptual framework and emphasised the critical role of technology adoption and government support for enhancement of operational efficiency and financial performance of MSMEs under the GST regime. Despite initial transition challenges, such as compliance complexity, frequent regulatory changes, etc., the implementation of GST had an overall positive impact on the operational efficiency and financial performance of MSMEs in Bihar. Hypothesis H1 shows that the implementation challenges negatively influenced operational efficiency during the initial implementation phase with $\beta = -0.72$, $t = 14.31$, $p < 0.001$. The result of hypothesis H2 depicts that technology adoption exhibits a significant positive effect on operational efficiency with $\beta = 0.64$, $t = 11.87$, $p < 0.001$, reflecting increased use and adoption of digital tools such as e-filing, e-invoicing, e-way bill generation, etc. Government support further contributed positively to operational efficiency with $\beta = 0.53$, $t = 9.21$, $p < 0.001$, supported the hypothesis H3 and highlighted the importance of training programs for effective implementation of GST, establishment of GST Suvidha Kendra, dissemination of information online through GST portal, webinars, etc. by the government. Finally, the result of hypothesis H4 with $\beta = 0.69$, $t = 12.54$, $p < 0.001$ supported that operational efficiency substantially impacted the financial performance of MSMEs. Improved operational efficiency among MSMEs led to better financial performance in terms of turnover, net worth, profitability, working capital, etc. The findings viewed through the Institutional

Theory lens indicate that coercive institutional pressures associated with GST implementation initially created compliance challenges for MSMEs. However, normative support through government initiatives and mimetic adoption of digital technologies enabled MSMEs to adapt to the evolving regulatory environment. This interaction of institutional pressures explains the significant positive effects of technology adoption and government support on operational efficiency and financial performance observed in the study. Although increased input costs due to ITC restrictions on purchases from non-registered and composition suppliers are a big concern for MSMEs, this needs to be looked into.

Conclusion

As described above, the implementation of GST had a significant impact on the operational and financial dynamics of MSMEs in Bihar. The results of the Structural Equation Modelling (SEM) provide strong empirical support for all hypotheses of the study. GST implementation challenges exhibit a significant negative impact on operational efficiency, while technology adoption and government support positively influenced operational efficiency. MSMEs of Bihar experienced considerable short-term implementation challenges arising from regulatory complexities, compliance costs, preparedness, need to adapt to new digital filing procedures, etc. It emphasises the critical role of digital transformation and its adoption for enhancing business process efficiency among MSMEs. Results also highlight the importance of government-supported training programs, webinars, GST facilitation mechanisms and prompt and accurate information dissemination. Finally, operational efficiency had a significant positive impact on the financial performance of MSMEs and translated into an enhancement in profitability, turnover, net worth, working capital, etc., especially after implementation of GST. Overall, the findings indicate that implementation of GST had acted as a catalyst and improved transparency, promoting technology adoption as well as digital compliance and enhanced ease of doing business among MSMEs working in Bihar. Although the transition phase had several challenges, the long-term benefits in terms of institutional adaptability of provisions of GST, operational efficiency and

financial performance outweigh the initial difficulties faced by MSMEs in Bihar.

Theoretical Implication

The proposed model introduces novel theoretical insights related to how organisational behaviour is impacted by external pressures through the lens of institutional theory. In this schema, institutions are referred to as pressure and implementation challenges are the institutional restraints, such as regulatory complexity, lack of standardisation and resistance to change. These challenges affect technology adoption, signifying those organisations do not adopt technology solely based on efficiency but are dictated by coercive, normative and mimetic pressure. Moreover, the model identifies government support as an important institutional force that can mitigate uncertainty and legitimise technology adoption. Government can use their policy, incentives and regulatory frameworks as coercive mechanisms to sanction alignment with institutional expectations and facilitate its adoption for firms. This supports the insight that institutional environment plays a crucial role in shaping technological choices. The relationship between technology adoption, operational efficiency and financial performance broadens institutional theory by introducing performance outcomes. Secondly, the idea that institutional compliance done through technology adoption has demonstrated how it can improve organisational performance and provide legitimacy. Apart from empirical findings, the study also contributes to the literature by extending the application of the Institutional Theory Framework to the GST context by providing evidence from a relatively under-researched state in India, i.e. Bihar. The model thus extends theory by linking institutional pressures and performance outcomes that reflect dimensions of external environments and provide for a broader understanding of the forces driving both adoption behaviour as well as organisational success.

Policy Implication

The study suggests that policymakers should focus on simplifying the compliance procedures and avoiding frequent regulatory changes so that uncertainty and administrative burden on MSMEs can be minimised to extend the maximum benefit of GST for them. Targeted training would help to accelerate taxpayer understanding of GST

mechanisms. Therefore, policymakers must focus on building robust digital infrastructure, expanding training outreach and promoting affordable technology adoption, especially in rural and semi-urban areas in the state. For simplifying the compliance burden among MSMEs in Bihar, policymakers should focus on creating a more streamlined, accessible and supportive GST framework, especially tailored to the needs of MSMEs. Further, easing restrictions on Input Tax Credit (ITC), particularly for transactions involving small values from unregistered suppliers and composition dealers, can help to reduce input costs and improve cash flow. A collaborative approach involving government support, technological upgradation and capacity building will be essential for sustained long-term growth and financial stability of MSMEs in the GST regime.

Limitations and Scope for Further Study

As far as the limitations of this study are concerned, it focused on the data collected from MSMEs working in Bihar, one of the eastern states in India, which may not represent the actual status of the impact of Goods and Services Tax on business performance and financial standing of MSMEs in India. Moreover, parameters taken for undertaking the research in this study may omit some important aspects like industry and sector-wise analysis, regional product-wise analysis, etc. The enterprise size was not incorporated as a moderating variable in the study because the sample was highly skewed towards micro enterprises (more than 90%) and would not produce statistically reliable or meaningful results. Although the sample size of 573 MSMEs is significant for this analysis, it may not capture the full spectrum of business entities within the MSME sector. Therefore, expanding the geographic scope by including more regions in India and expanding the sample size after inclusion of other parameters would provide a more comprehensive understanding. Future researchers can do multi-group analysis for determining the distinct effect of the introduction of GST on MSMEs considering operational district, industrial sector, business size, ownership type, years of operation, etc. Further, to gain deeper insights into business growth and financial standing of MSMEs, studies

could also incorporate a questionnaire related to the financial standing of MSMEs in quantitative form and collect the desired quantitative information from them, if they do not hesitate to provide the same. Sector-specific studies focusing on manufacturing, services or agro-based industries can be done to provide deeper insights into differential impacts of GST across industries.

Abbreviations

FP: Financial Performance, GS: Government Support, GST: Goods and Services Tax, IC: Implementation Challenges, ITF: Institutional Theory Framework, MSMEs: Micro, Small and Medium Enterprises, OE: Operational Efficiency, PLS-SEM: Partial Least Squares Structural Equation Modelling, SEM: Structural Equation Modelling, TA: Technology Adoption

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None.

Author Contributions

Mani Shankar Singh: Conceptualisation, Data Collection, Data Analysis, Findings, Writing Original Draft, Review, Editing, Ashish Ranjan Sinha: Supervision.

Conflict of Interest

The authors declare that there is no conflict of interest.

Data Availability

The complete data set that supports the findings of this study is available from the corresponding author upon reasonable request.

Declaration of Artificial Intelligence (AI) Assistance

The authors confirm that no generative artificial intelligence (AI) or AI-assisted technologies were used and all scholarly content, arguments and theoretical contributions are the original work of the authors.

Ethics Approval

Not Applicable.

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