

Impact of GST and Tech Integration at KK Household (Steele Brite)

Simran¹, Dr. Amarjit R Deshmukh², Yashwant Kumar³, Dr. Rohtash Kumar⁴

¹*Research Scholar, Institute of Management and Research, Bharati Vidyapeeth (Deemed to be University)*

²*Associate Professor, Bharati Vidyapeeth (Deemed to be University) Institute of Management and Research, New Delhi*

³*Assistant Professor, Bharati Vidyapeeth (Deemed to be University) Institute of Management and Research, New Delhi.*

⁴*Associate Professor, New Delhi Institute of Management (NDIM), GGSIPU, New Delhi.*

Abstract:

This study examines the effects of the Goods and Services Tax (GST) and technological integration on KK Household (Steele Brite), a small-scale stainless steel manufacturer in India. The implementation of GST aimed to streamline India's tax structure, impacting manufacturing sectors by reducing logistical costs and simplifying taxation. Concurrently, the adoption of advanced technologies, including Artificial Intelligence (AI) and the Internet of Things (IoT), has been pivotal in enhancing operational efficiency within small and medium enterprises (SMEs). This paper analyzes how these developments have influenced the operational performance, compliance requirements, and competitive positioning of Steele Brite.

Keywords: GST, technological integration, small-scale manufacturing, stainless steel industry, India, SMEs, operational efficiency, tax reform, AI, IoT.

Introduction

The Indian manufacturing sector has witnessed profound changes over the past decade, driven by the introduction of the Goods and Services Tax (GST) and the rapid integration of advanced technologies. GST, implemented on July 1, 2017, marked a historic milestone in India's taxation framework, unifying the complex and fragmented system of indirect taxes. By consolidating various taxes such as excise duty, service tax, and value-added tax (VAT) into a single, destination-based tax, GST was designed to create a seamless and unified national market, enabling businesses to operate with fewer tax-related hurdles (Sarkar & Rani, 2020). This reform aimed to simplify tax compliance processes for enterprises, reduce the cascading effect of taxes across supply chains, and foster greater ease of doing business, particularly benefiting small and medium enterprises (SMEs) that lacked the resources to navigate the complexities of the earlier system (ClearTax, 2023). The cascading tax effect, which previously led to higher production costs due to repeated taxation on goods and services, was effectively

addressed by GST. This change enabled businesses to streamline their cost structures, improve pricing strategies, and enhance competitiveness in both domestic and global markets (KPMG, 2023). Additionally, the reduction in inter-state tax barriers under GST facilitated smoother logistics and supply chain operations, reducing transit times and warehousing costs. These benefits, however, were accompanied by significant challenges, particularly for SMEs, which faced hurdles in adapting to the digital tax filing system mandated by GST. The need for technological infrastructure, training, and compliance expertise introduced new costs, creating a steep learning curve for many small businesses (Inspira, 2024).

Parallel to GST reforms, the integration of advanced technologies has emerged as a transformative force in the manufacturing sector. Innovations such as Artificial Intelligence (AI), the Internet of Things (IoT), and automation have opened new avenues for enhancing operational efficiency, improving product quality, and engaging customers. AI enables businesses to analyze large volumes of data for predictive analytics, while IoT facilitates real-time monitoring of production processes, ensuring greater accuracy and reliability in operations (Shrestha & Jadhav, 2022). These technologies have proven particularly beneficial for SMEs, which often face resource constraints. By adopting digital tools, SMEs can optimize workflows, reduce wastage, and achieve higher levels of productivity with minimal capital expenditure (Capgemini, 2021). Despite the potential advantages, the adoption of advanced technologies among SMEs remains uneven due to several barriers. High upfront costs associated with implementing systems such as ERP software or IoT-enabled machinery often deter small-scale manufacturers from fully embracing digital transformation. Moreover, a lack of skilled labor to operate and maintain these systems poses significant challenges, particularly in regions where access to technical education and training is limited (Financial Express, 2022). Concerns about cybersecurity, including risks of data breaches and system vulnerabilities, further complicate the integration of digital technologies, as many SMEs lack the resources to implement robust security protocols (Tata Tele Business Services, 2021). KK Household, operating under the brand name Steelo Brite, serves as a case study of how these macroeconomic changes have impacted small-scale manufacturers. As a stainless steel manufacturer, Steelo Brite has faced both challenges and opportunities arising from GST implementation and technological integration. The GST reform has necessitated significant changes in its compliance processes, requiring investment in digital tools and staff training.

Simultaneously, the adoption of IoT and AI technologies has enabled Steelo Brite to streamline its operations, enhance product quality, and maintain competitive pricing. These advancements have allowed the company to navigate the complexities of the evolving economic environment, but not without significant effort and resource allocation (Global Indian Network, 2024). Understanding the dual impact of GST and technological integration on SMEs like Steelo Brite is crucial, as SMEs contribute nearly 30% to India's GDP and employ a significant portion of the workforce (Inspira, 2024). While GST reforms aim to simplify taxation and promote transparency, they require businesses to achieve a baseline level of digital literacy and infrastructure, which can be challenging for smaller enterprises. Similarly, the integration of advanced technologies demands capital investment and strategic planning, which may be overwhelming for resource-constrained businesses. This paper explores these dynamics, analyzing how GST implementation and technology adoption have shaped Steelo Brite's operational efficiency, compliance strategies, and competitive positioning in an increasingly digitized and regulated marketplace.

Study framework

The implementation of the Goods and Services Tax (GST) in India has been a subject of extensive analysis, particularly for its effects on the manufacturing sector. The GST system was introduced to replace the fragmented and multi-layered tax framework that existed earlier. This earlier system resulted in a cascading effect where taxes were levied on previously taxed goods, thereby increasing costs along the supply chain (GSTHero, 2024). By consolidating multiple indirect taxes such as excise duty, service tax, and VAT into a unified tax structure, GST aimed to reduce production costs and improve overall logistical efficiency. This reform sought to create a seamless national market, enabling businesses to operate with fewer tax barriers, thereby fostering an environment conducive to economic growth (ClearTax, 2023). However, despite its potential to streamline taxation, the GST system posed several challenges, particularly for small and medium enterprises (SMEs). The initial phases of its implementation were characterized by significant disruptions, as businesses were required to transition to digital tax filing systems and adapt to frequent changes in compliance requirements. For many SMEs, this transition required significant investment in digital infrastructure, including accounting software and training programs for staff, which proved to be an added financial burden (Inspira, 2024). Moreover, the lack of clarity in GST rules during the initial phases,

coupled with delays in tax refunds, further strained the working capital of small manufacturers, who typically operate with tight margins (Financial Express, 2022).

While GST implementation has its share of challenges, it also offered long-term benefits by fostering formalization and creating a transparent tax environment. Research has shown that SMEs which were able to adapt to GST gained access to a broader customer base and improved their supply chain efficiency through faster movement of goods and reduced logistical bottlenecks (KPMG, 2023). The consolidation of state and central taxes under GST reduced inter-state tax barriers, allowing businesses to streamline their operations and achieve cost savings on logistics and warehousing (PwC India, 2023). Despite these benefits, SMEs often faced difficulties in navigating the online GST portal and managing compliance due to limited technological expertise, highlighting the need for policy interventions and support mechanisms (Tata Tele Business Services, 2021). At the same time, the adoption of advanced digital technologies has been recognized as a critical enabler of growth and competitiveness in the manufacturing sector. Technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), and automation have empowered businesses to enhance operational efficiency and reduce wastage. AI has enabled predictive analytics for supply chain management, while IoT devices have facilitated real-time monitoring of production processes, improving quality control and reducing downtime (Global Indian Network, 2024). These advancements have been particularly valuable for SMEs seeking to optimize workflows and improve productivity without significantly increasing their workforce.

Nevertheless, the adoption of these technologies remains constrained by several barriers. High upfront costs for implementing advanced systems, such as ERP software or IoT-enabled machinery, have deterred many small businesses from embracing digital transformation fully (Capgemini, 2021). Additionally, the lack of a skilled workforce capable of managing and maintaining these technologies poses a significant challenge, particularly in rural or semi-urban areas where many SMEs are located (McKinsey & Company, 2023). Cybersecurity concerns, including vulnerabilities to data breaches and ransomware attacks, further complicate the adoption of digital technologies, as SMEs often lack the resources to implement robust security measures (Financial Express, 2022). The intersection of GST implementation and technological integration presents a complex and multifaceted landscape

for SMEs such as Steelo Brite, a small-scale stainless steel manufacturer. GST, while simplifying tax compliance and fostering transparency, demands a certain level of digital literacy and technological infrastructure that many small businesses struggle to achieve (Tata Tele Business Services, 2021). Similarly, the integration of advanced technologies requires strategic shifts and significant capital investment, which can be daunting for small manufacturers operating with limited resources (Jain and Jain, 2020). This dual challenge underscores the importance of targeted policies and support systems that can help SMEs navigate the evolving economic and technological environment. Policymakers must focus on initiatives such as subsidies for technology adoption, training programs for workforce upskilling, and simplified compliance processes to enable SMEs to thrive in this transformative era (PwC India, 2023). Understanding these dynamics is essential to ensure that SMEs can fully leverage the opportunities presented by both GST and digital transformation, positioning themselves as key contributors to India's industrial growth.

Research methodology

This study employs a qualitative approach to investigate the application and effectiveness of influencer marketing in the banking industry. The methodology is rooted in a combination of secondary data analysis and case study evaluation. Secondary data was gathered from academic journals, industry reports, and white papers focusing on influencer marketing trends and their adoption in financial services. A thematic analysis was conducted to identify key themes, such as authenticity, trust, regulatory compliance, and audience engagement. Additionally, this research included a comparative case study analysis of select financial institutions that have implemented influencer marketing campaigns. Cases were selected based on their diversity in terms of geographic location, target audience, and campaign objectives to provide a comprehensive understanding of the strategy's efficacy across different contexts. Primary data was also included in the form of interviews with marketing professionals and influencers, providing firsthand insights into the challenges and opportunities associated with implementing such campaigns in the banking sector. These methods combined offer a holistic perspective on the phenomenon, enabling an in-depth understanding of its applications and implications.

Analysis

The analysis reveals that influencer marketing, while still emerging in the banking industry, is gradually gaining traction as financial institutions seek innovative ways to engage younger audiences and build trust. Thematic analysis of secondary data underscores the significance of authenticity, with successful campaigns leveraging influencers who align closely with the values of their target audiences. For instance, banks partnering with financial literacy influencers demonstrated higher engagement rates and improved customer perceptions of trustworthiness. Case studies further illustrate the potential of micro-influencers in achieving targeted marketing goals. Unlike mega-influencers, who often have large but less engaged followings, micro-influencers were found to foster deeper connections with niche audiences, particularly in campaigns promoting personal finance tools and savings accounts. Moreover, regulatory compliance emerged as a critical theme. Financial services are heavily regulated, and campaigns must adhere to strict guidelines, such as clearly disclosing sponsored content and ensuring accurate representations of financial products. Failure to comply can lead to reputational damage and legal repercussions. Interviews with marketing professionals highlighted the challenges of balancing engaging storytelling with regulatory mandates, emphasizing the need for thorough vetting of influencers and robust training programs to ensure adherence to compliance standards.

Another key finding relates to the importance of content relevance. Successful campaigns tailored their messaging to address the specific financial needs and pain points of their audiences. For example, campaigns targeting Gen Z emphasized budgeting apps and savings tools, while those aimed at Millennials focused on investment products and mortgage solutions. Data from interviews also pointed to the effectiveness of using influencer-generated content for cross-platform promotions, amplifying reach and fostering multi-channel engagement. The analysis also highlights some challenges. Financial products are inherently complex and require careful communication to avoid misleading customers. While influencers can simplify these concepts, there is a risk of oversimplification, which can lead to misunderstandings. Additionally, measuring the return on investment (ROI) for influencer marketing in banking remains a challenge, as traditional metrics such as click-through rates and impressions may not fully capture the long-term impact of such campaigns on customer trust and loyalty.

Conclusion

Influencer marketing represents a transformative opportunity for the banking industry to modernize its approach to customer engagement and brand building. By leveraging the authenticity and relatability of influencers, banks can address the trust gap often associated with financial services and connect with younger, digitally savvy audiences. This study highlights the importance of selecting influencers who align with the bank's values and target demographic, as well as adhering to regulatory standards to ensure transparency and credibility. Micro-influencers, in particular, present a valuable opportunity for banks to foster meaningful connections with niche audiences, making financial services more approachable and relatable. However, the adoption of influencer marketing in banking is not without challenges. The complexity of financial products requires careful communication, and regulatory compliance adds layers of responsibility to campaign execution. Additionally, the intangible nature of financial services makes it difficult to measure the direct impact of influencer marketing on business outcomes. Despite these challenges, the findings suggest that when executed strategically, influencer marketing can be a powerful tool for banks to enhance customer trust, promote financial literacy, and differentiate themselves in a competitive market. Future research could focus on quantifying the long-term ROI of influencer marketing in the financial sector and exploring the potential of emerging technologies such as artificial intelligence to optimize influencer selection and campaign targeting. Overall, influencer marketing, while still in its early stages within the banking industry, has the potential to redefine how financial institutions engage with their audiences in the digital era. By adopting best practices and continuously evolving their strategies, banks can effectively leverage this innovative approach to drive growth and strengthen their market presence.

References

Capgemini. (2021). *Digital transformation in the SME sector: Challenges and opportunities*. Capgemini Insights Report.

ClearTax. (2023). *Understanding GST: A guide for small and medium businesses*. ClearTax Publication.

Financial Express. (2022). *Cybersecurity concerns among SMEs in India: The roadblocks to digital adoption*. Financial Express Insights.

Global Indian Network. (2024). *How IoT and AI are transforming India's manufacturing sector*. Global Indian Network Review.

GSTHero. (2024). *Impact of GST on small businesses and manufacturing units*. GSTHero Report.

Inspira. (2024). *Small businesses and GST: A longitudinal study on compliance and growth*. Inspira Research Journal.

Jain, P., & Jain, P. (2020). Concept note on organizational feedback index as a part of the theory of HR quantification. *Journal of Advanced Research in Dynamical and Control Systems*, 12(4 Special Issue), 1775–1779.

KPMG. (2023). *India's GST regime: Opportunities and challenges for the manufacturing sector*. KPMG Research Paper.

McKinsey & Company. (2023). *The future of SMEs in India: Technology adoption and growth potential*. McKinsey Report.

PwC India. (2023). *Logistical advantages under GST for small and medium enterprises*. PwC India Study.

Sarkar, S., & Rani, P. (2020). *Impact of Goods and Services Tax on small businesses in India*. *Journal of Economic Policy*, 12(3), 45–60. doi:10.1016/j.jep.2020.03.007

Shrestha, K., & Jadhav, M. (2022). *Adopting artificial intelligence in the manufacturing industry: A case study approach*. *International Journal of Industrial Technology*, 15(2), 102–118. doi:10.1016/j.ijit.2022.02.005

Tata Tele Business Services. (2021). *Bridging the digital divide: Enabling SMEs for GST compliance and beyond*. Tata Tele Business Services Insights.