JETRM International Journal of Engineering Technology Research & Management (IJETRM) <u>https://ijetrm.com/</u>

GOVERNMENT E-MARKETPLACE: A DIGITAL CATALYST FOR BUILDING VIKSIT BHARAT

Sushma K

Assistant Professor, Department of Commerce, BMS College for Women (Autonomous), Bengaluru, Karnataka, India

ABSTRACT

The Government e-Marketplace (GeM), established in 2016 under the Digital India initiative, represents a paradigm shift in India's public procurement landscape. This paper examines GeM's operational framework, evaluates its contributions to transparency, efficiency, and inclusivity, and analyzes its alignment with India's broader developmental vision—Viksit Bharat 2047. Using secondary data, case analysis, and comparative benchmarking, this study identifies key enablers and constraints in the platform's evolution. With over ₹13.6 lakh crore in Gross Merchandise Value and participation from over 10 lakh MSMEs and thousands of women entrepreneurs and startups, GeM has enabled cost savings, streamlined transactions, and broadened market access. However, implementation challenges such as limited digital literacy, onboarding complexity, and regional disparities in adoption persist. The paper concludes by offering a roadmap incorporating AI, blockchain, and user-centric design to reinforce efficiency, inclusion, and trust in public procurement. This research contributes to the growing body of literature on digital governance and provides insights for policymakers seeking to modernize procurement ecosystems globally.

Keywords:

Digital Procurement, e-Governance, Viksit Bharat, MSMEs, Public Sector Reform, Technology Adoption

INTRODUCTION

Public procurement forms a critical pillar of economic governance. The Government e-Marketplace (GeM), launched in 2016, aims to digitize procurement processes to reduce corruption, lower transaction costs, and enhance supplier diversity. Aligned with the Atmanirbhar Bharat mission, GeM leverages digital infrastructure—Aadhaar, Udyam, PFMS, UPI—to support its goals. This paper investigates how GeM aligns with India's vision for inclusive, technology-driven development under the Viksit Bharat 2047 roadmap. While initiatives like ONDC complement GeM in democratizing access for small players, the current study focuses exclusively on GeM's design, outcomes, and challenges

LITERATURE REVIEW

The literature on government e-marketplaces in various countries was reviewed to understand how these systems function globally. Additionally, previous research on the Indian government e-marketplace was examined. Below is a summary of the review.

Saha et al., (2025) focused on recent technology-driven changes in public procurement in India, particularly the Government e-Marketplace (GeM). It revealed a non-linear change where a few government buyers dominate while many stakeholders are still adapting. A key policy recommendation is to diversify support systems for better inquiry resolution. The study also suggests that promoting collective representation of small and marginalized sellers can improve government outreach and support inclusive development.

Khan, (2025) highlighted the challenges GeM faces, including quality control, vendor training and works contract integration. These challenges offer opportunities for improvement. The researcher suggested strategies like better supplier vetting, enhanced training, and expanded functionality. GeM showcases how technological innovations can modernize procurement, increasing efficiency and transparency in the public sector.

Ali Alryalat et al., (2023) examined the perceived barriers to Business-to-Government (B2G) e-commerce adoption through the case of India's Government e-Marketplace (GeM) portal. Using the DEMATEL approach, they analyzed data from eight experts in B2G procurement. The main barriers identified include lack of expertise and technical skills, perceived information security risks, insufficient IT infrastructure, low awareness of government issues and legal policies, and inadequate top management support.

JETRM International Journal of Engineering Technology Research & Management (IJETRM) https://ijetrm.com/

Sethi et al., (2023) examined the impact of the Government E-Marketplace (GeM) on procurement in a public hospital in India, highlighting the importance of timely procurement in the health sector. Long lead times (LT) can lead to poor material availability and dissatisfaction. GeM was introduced to address issues with traditional procurement methods like tenders and quotations. The study found that Internal Lead Time (ILT) using conventional methods was higher than that of GeM, which offers a more efficient processing mechanism.

Pandey, (2019) discusses the challenges in India's public procurement system and how the Government e-Marketplace (GeM) addresses these issues. GeM, a B2G platform, streamlines the procurement process by reducing manual verification, which has decreased lead times and increased transparency. It has also fostered entrepreneurship and job creation. However, institutional bottlenecks and a traditional mindset among procurement authorities have hindered its broader adoption.

Albano et al., (2015) explored the influence of structural aspects of Italy's public e-marketplace on the likelihood of micro and small firms winning public contracts. Using data from low-value transactions, they analyze how the nature of public buyers and the type of goods/services impact firms' chances. The study also looks at how geographical distance affects different firm sizes' success in securing contracts. Study findings indicate that characteristics of traditional procurement markets are reflected in the digital space. The researchers recommend joint ventures as a strategy to enhance smaller firms' participation in major contracts.

Gupta & Narain, (2012) examined e-procurement adoption in Indian organizations, highlighting increased flexibility, cost reduction, and enhanced customer satisfaction. The study surveyed 36 organizations, found that adoption is likely to rise due to benefits, competitive pressure, and government regulations. It emphasizes the need for a cultural shift to encourage e-procurement adoption among employees and partners. Management's attitude is vital, with reduced costs, improved productivity, and efficiency cited as main advantages.

Studies by Saha et al. (2025) and Khan (2025) emphasize GeM's role in digitizing procurement but highlight uneven adoption and vendor capability gaps. Alryalat et al. (2023) identify barriers to B2G adoption, including IT skill shortages and inadequate legal-policy awareness. Internationally, Albano et al. (2015) analyze Italy's emarketplace to understand small firm dynamics. However, comparative evaluations of global models remain limited. Furthermore, the application of models like the Technology Acceptance Model (TAM) or Unified Theory of Acceptance and Use of Technology (UTAUT) to GeM remains unexplored. This indicates a need for a conceptual and empirical bridge between technology adoption theory and public procurement in developing countries.

RESEARCH GAP

Most existing literature on GeM is descriptive and policy-oriented, lacking rigorous analysis of user experience, sectoral adoption disparities, and long-term impact on procurement efficiency. Empirical evaluations of platform performance and stakeholder satisfaction are missing. Moreover, strategic insights from global e-procurement ecosystems are insufficiently leveraged to benchmark GeM's potential.

STATEMENT OF THE PROBLEM

The Government e-Marketplace (GeM) was launched to enhance public procurement by ensuring transparency and supporting MSMEs and startups through digital inclusion. Despite its growth in transactions and registrations, operational efficiency and stakeholder satisfaction need further investigation. There are gaps between policy goals and actual implementation, especially in vendor onboarding, payment processing, and logistics. Many small and rural suppliers struggle with digital literacy and competitive participation. The potential for integrating technologies like AI and blockchain for improved procurement hasn't been fully explored. A comprehensive evaluation is necessary to assess GeM's effectiveness and identify improvements for a more inclusive and tech-driven procurement system.

RESEARCH OBJECTIVES

- To evaluate the contribution of GeM in promoting inclusive, transparent, and efficient public procurement.
- To identify operational challenges and regional disparities in GeM adoption.
- To propose a strategic framework leveraging digital technologies for enhancing platform scalability and stakeholder trust.

JETRM

International Journal of Engineering Technology Research & Management

(IJETRM)

https://ijetrm.com/

METHODOLOGY

This study adopts a qualitative approach supported by secondary data. Platform analytics (GeM dashboard), policy documents, and academic sources were analyzed. The study applies a SWOT framework and draws comparisons with global public e-procurement systems such as KONEPS (South Korea), ComprasNet (Brazil), and Contracts Finder (UK) to contextualize findings. Limitations include lack of primary survey data, which is addressed through robust triangulation of published performance indicators.

DATA AND DISCUSSIONS

GeM Operational Framework

GeM streamlines procurement by integrating stakeholders through a unified digital interface. It offers three procurement modes—Direct Purchase, L1 Bidding, and Reverse Auction. Key features include integration with validation systems (Aadhaar, PAN, PFMS), automated workflows, real-time order tracking, and built-in quality assurance protocols. The platform is inclusive by design, with policy mandates to onboard startups, SC/ST entrepreneurs, and women-led enterprises.



(Source: Author's Compilation)

Figure 1: Purpose of GeM Portal

Achievements and Platform Impact

GeM's Gross Merchandise Value (GMV) crossed ₹13.6 lakh crore with over 2.8 crore orders as of May 2025. More than 10.42 lakh MSE sellers and service providers, 30,866 startups, and 1.64 lakh buyer organizations are onboarded. This scale indicates significant improvements in procurement efficiency, cost savings (estimated at 8-10% of procurement spend), and market access for MSMEs. A digital audit trail enhances transparency, accountability, and compliance with financial norms.

JETRM

International Journal of Engineering Technology Research & Management

(IJETRM) https://ijetrm.com/

Fiscal Year	GMV (₹ lakh crore)			
2016-17	Launch-year baseline			
2019-20	₹0.42 lakh crore			
2021-22	₹1.06 lakh crore			
2022-23	₹2.0 lakh crore			
2023-24	₹3.5 lakh crore			
Apr 24 - Jan 25	₹4.09 lakh crore			
FY 2024-25 (Apr-May)	₹5.43 lakh crore			
(Source: Author's compilation from GeM platform) Table 1: GeM Year-Wise Growth				

The Government e-Marketplace (GeM) has demonstrated exponential growth since its inception in 2016, evolving into a cornerstone of India's digital public procurement architecture. The platform's Gross Merchandise Value (GMV) surged from a modest ₹422 crore in FY 2019–20 to an impressive ₹5.43 lakh crore by May 2025, reflecting a staggering scale-up in adoption across ministries, departments, and state governments. Notably, services procurement has overtaken goods, contributing ₹2.54 lakh crore out of ₹4.09 lakh crore transacted between April 2024 and January 2025. Uttar Pradesh emerged as the top-performing state with cumulative procurement worth ₹65,227 crore, followed by strong participation from Gujarat, Maharashtra, and Delhi. The platform currently hosts over 11,000 product and 330 service categories, facilitating seamless access for more than 1.6 lakh buyer organizations and 23 lakh registered sellers and service providers. Micro and Small Enterprises (MSEs) contribute nearly half of the total GMV, with women-led MSEs alone accounting for ₹2,200 crore—underscoring GeM's inclusive design.

MSME Empowerment and Grassroots Impact

GeM removes entry barriers and transaction inefficiencies that historically excluded MSMEs from public procurement. Simplified registration, reduced caution money, and visibility tools improve participation. Over 1.84 lakh women entrepreneurs and 1.3 lakh artisans/weavers now access public contracts. Capacity-building initiatives, however, need to be scaled with localized training and vendor support desks.

Technological Integration

GeM is integrated with Aadhaar, DigiLocker, UPI, and GSTN. AI-powered analytics offer real-time procurement trends, demand forecasts, and supplier recommendations. Blockchain integration for smart contracts, currently in pilot stage, could reduce fraud and enhance delivery assurance. Digital identity and financial integration support seamless transaction management and audit compliance.

Sustainability and Green Procurement

GeM's green channel promotes eco-labeled products. Reduced paperwork, centralized logistics, and digital transactions lower carbon footprint. The platform aligns with India's Sustainable Public Procurement (SPP) goals and supports SDG 12 (Responsible Consumption and Production).

JETRM International Journal of Engineering Technology Research & Management (IJETRM) https://ijetrm.com/

SWOT Analysis



(Source: Author's compilation) Figure 2: SWOT Analysis of GeM platform

Benchmarking GeM with Global Platform

Table 2 shows the comparative view of Gem with global procurement platforms		Table 2 shows the com	parative view of	Gem with globa	l procurement platforms
---	--	-----------------------	------------------	----------------	-------------------------

Feature / Metric	GeM (India)	KONEPS (South Korea)	ComprasNet (Bzazil)	Contracts Finder (UK)
Year launched	2016	2002	2000	2011
Integration with national IDs	Yes (Aadhar, Udyam)	Yes	Yes	Partial
AI-based recommendations	Pilot phase	Yes	Limited	No
Blockchain integration	Experimental	No	No	No
Vendor support programs	Basic	Advanced	Intermediate	Advanced
Transparency Tools	e-Auction, dashboards	Full disclosure portal	Price auditing	Contract histories
Sustainability Tags	Green Channel	Green Procurement Law	Not specified	Green supplier listings

(Source: Author's compilation)

STRATEGIC RECOMMENDATIONS

- User-Centric Design: Enhance UI/UX for seamless navigation, especially for first-time rural users.
- Digital Literacy Programs: Partner with CSCs and NGOs for vendor training.
- Adoption Incentives: Mandate GeM for all departments and link usage with budgetary incentives.
- Technology Integration: Scale blockchain pilots and embed AI for fraud detection.
- Sustainability Dashboard: Track and rank eco-friendly procurement for all departments

JETRM

International Journal of Engineering Technology Research & Management

(IJETRM)

https://ijetrm.com/

CONCLUSION

GeM is not just a procurement platform, it is a strategic lever for digital governance and economic inclusivity. To serve as a global model, it must address operational frictions, deepen stakeholder capacity, and scale technological interventions. As India marches toward its Viksit Bharat 2047 vision, GeM stands out as an institutional innovation worthy of continuous policy investment and scholarly engagement.

REFERENCES

- [1] Albano, G. L., Antellini Russo, F., Castaldi, G., & Zampino, R. (2015). Evaluating Small Businesses' Performance in Public e-Procurement: Evidence from the Italian Government's e-Marketplace. *Journal of Small Business Management*, 53, 229–250. https://doi.org/10.1111/JSBM.12190
- [2] Ali Alryalat, M. A., Alryalat, H., Alhamzi, Khalidussain., & Sharma, A. (2023). Perceived Barriers to Business-to-Government (B2G) E-Commerce Adoption: The Case of Government E-Marketplace (GeM) Portal in India. *International Journal of Electronic Government Research*, 19(1), 1–19. https://doi.org/10.4018/IJEGR.323571
- [3] Gupta, M., & Narain, R. (2012). A survey on adoption of e-procurement in Indian organisations. International Journal of Indian Culture and Business Management, 5(1), 76. https://doi.org/10.1504/IJICBM.2012.044019
- [4] Khan, D. (2025). Revolutionizing Public Procurement in India: The Impact of the Government e-Market Place (GeM). *International Journal of Innovations & Research Analysis (IJIRA)*, 05(01), 1–10. https://www.nipfp.org.in/media/medialibrary/2017/07/WP_2017_204.pdf
- [5] Pandey, C. (2019). Digital vs. physical procurement: role of GeM in transforming B2G procurement in India. *The Business & Management Review*, 10(5). https://www.proquest.com/docview/2472179254?pqorigsite=gscholar&fromopenview=true&sourcetype=Conference%20Papers%20&%20Proceedings
- [6] Saha, D., Singh, T., Maheshwari, G., Arora, K., Kartik, & Kapoor, K. (2025). On Recent Advances in Public Procurement: An Exploration of the Government e-Marketplace in India. *Public Administration and Development*. https://doi.org/10.1002/PAD.2113;
- [7] Sethi, S., Arora, P., & Koushal, V. (2023). Impact of Government-e-Marketplace (GeM) on Procurement compared to Conventional Methods in a Public Hospital in India. *International Journal of Health Systems and Implementation Research*, 7(1), 29–39. https://ijhsir.ahsas-pgichd.org/index.php/ijhsir/article/view/184
- [8] <u>"Government e-Marketplace achieves a Gross Merchandise Value of Rs. 1.5 Lakh Crores"</u>. The Business <u>Standard</u>. 3 February 2023.
- [9] <u>https://www.tice.news/tice-dispatch/business-finance-economy-and-corporate-news/gem-digital-revolution-pm-modi-praise-9085170</u>