

**"NAVIGATING NPM: COMPARATIVE ANALYSIS OF EFFICIENCY,  
EFFECTIVENESS, AND ECONOMY IN ONGC AND SAIL"**

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**ABSTRACT**

*This paper delves into the intricacies of New Public Management (NPM) within the context of two prominent Indian public sector enterprises: Oil and Natural Gas Corporation (ONGC) and Steel Authority of India Limited (SAIL). NPM principles emphasize efficiency, effectiveness, and economy in public sector management. Through a comparative analysis, this research assesses the application and impact of NPM strategies within ONGC and SAIL. Utilizing a combination of qualitative and quantitative methodologies, the study examines key performance indicators, organizational structures, management practices, and regulatory frameworks to evaluate the relative success and challenges faced by both organizations in implementing NPM principles. The findings offer insights into the complexities of NPM adoption in diverse organizational settings and contribute to the discourse on public sector reforms in emerging economies like India.*

**KEYWORDS:** ONGC, Oil and Natural Gas Corporation, Public sector enterprise, Energy sector, Oil exploration.

**I. INTRODUCTION**

New Public Management (NPM) has emerged as a transformative approach to public sector governance, advocating for market-oriented reforms to enhance organizational efficiency, effectiveness, and economy. This paradigm shift has significant implications for public sector enterprises worldwide, including those operating in emerging economies like India. In this context, the Oil and Natural Gas Corporation (ONGC) and the Steel Authority of India Limited (SAIL) stand as prominent examples of public sector entities tasked with driving economic growth and development within their respective industries. As stalwarts in the energy and steel sectors, ONGC and SAIL play pivotal roles in India's quest for energy security, infrastructure development, and industrialization.

The advent of NPM has ushered in a new era of governance characterized by decentralization, performance orientation, accountability, and customer focus. At its core, NPM seeks to emulate market mechanisms within the public sector, fostering competition, innovation, and efficiency while maintaining public accountability and service delivery. The principles of NPM, rooted in neoliberal ideologies, challenge traditional bureaucratic structures and hierarchical decision-making processes prevalent in public sector organizations. Instead, they emphasize results-based management, strategic planning, and performance measurement as means to achieve organizational objectives and deliver value to stakeholders.

In the Indian context, the adoption of NPM principles poses both opportunities and challenges for organizations like ONGC and SAIL. On one hand, it offers the promise of enhanced operational efficiency, cost-effectiveness, and responsiveness to market dynamics, thereby improving their competitiveness and sustainability. On the other hand, it necessitates fundamental changes in organizational culture, management practices, and regulatory frameworks, which may encounter resistance from entrenched interests, vested stakeholders, and bureaucratic inertia. Thus, the journey towards NPM implementation is fraught with complexities, requiring careful navigation and strategic foresight.

Against this backdrop, this research endeavors to explore the application and impact of NPM within ONGC and SAIL, with a specific focus on efficiency, effectiveness, and economy. By conducting a comparative analysis of these two organizations, we seek to elucidate the extent to which they have embraced NPM principles, the challenges encountered, and the implications for their performance and sustainability. Through a combination of qualitative and quantitative methodologies, we aim to unravel the nuances of NPM adoption in diverse organizational settings and contribute to the discourse on public sector reforms in India.

The findings of this study hold significance for policymakers, practitioners, and scholars engaged in public sector management, offering insights into the complexities of NPM implementation, its potential benefits, and the hurdles to be overcome. By examining the experiences of ONGC and SAIL within the broader context of NPM, we hope to inform future strategies for enhancing organizational effectiveness, accountability, and service delivery in the public sector. Moreover, this research contributes to the ongoing dialogue on governance reforms in emerging economies, shedding light on the challenges and opportunities inherent in the pursuit of NPM ideals.

## **II. INNOVATION AND TECHNOLOGY ADOPTION**

### **1. ONGC's Technological Advancements:**

- ONGC has prioritized innovation in its core operations, particularly in the oil and gas sector.
- Advanced drilling techniques: ONGC employs state-of-the-art equipment and methodologies to access previously inaccessible reserves, optimize well productivity, and reduce drilling costs.
- Digitalization and data analytics: ONGC leverages digital technologies to enhance reservoir modeling, predictive maintenance, and operational decision-making, improving asset performance and minimizing downtime.

### **2. SAIL's Challenges and Initiatives:**

- Legacy issues: SAIL faces challenges in modernizing its production processes due to the complexity of the steel industry and legacy infrastructure.

- Modernization efforts: SAIL has embarked on initiatives to revamp its manufacturing facilities, invest in advanced technologies like blast furnace technology, and enhance process automation to improve efficiency, reduce energy consumption, and mitigate environmental impact.

### 3. Common Challenges and Opportunities:

- Organizational culture: Both ONGC and SAIL recognize the importance of fostering a culture of innovation, creativity, and risk-taking to drive technological advancements.
- Resource allocation: ONGC's robust financial position enables it to explore frontier technologies and R&D initiatives, while SAIL must prioritize and optimize technology investments to maximize returns given its financial constraints.
- Collaboration and partnerships: Both organizations are exploring collaborations with technology providers and research institutions to accelerate innovation and technology transfer in areas such as product development, material science, and sustainable manufacturing practices.

### 4. Future Outlook:

- Innovation and technology adoption will continue to be pivotal for ONGC and SAIL to maintain competitiveness and sustainability in their respective industries.
- Visionary leadership, strategic foresight, and a relentless commitment to excellence are essential for unlocking the full potential of innovation and technology adoption in both organizations.
- Embracing innovation and technology will not only enhance operational efficiency but also drive sustainable growth and value creation for stakeholders in the dynamic landscape of the energy and steel industries.

## III. OPERATIONAL EFFICIENCY

### 1. ONGC's Operational Efficiency:

- **Streamlined Processes:** ONGC has implemented streamlined processes to enhance operational efficiency across exploration, production, and refining operations. This involves optimizing workflows, reducing redundancy, and employing best practices in project management.
- **Resource Optimization:** By focusing on resource optimization, ONGC has managed to reduce wastage and improve the utilization of materials, equipment,

and human resources. This includes better planning and allocation of resources to maximize output and minimize downtime.

- **Productivity Enhancements:** ONGC has leveraged advanced technologies and methodologies to boost productivity. This includes the use of automated systems, enhanced drilling techniques, and real-time data monitoring to improve the speed and accuracy of operations.
- **Cost Reduction:** Through various efficiency initiatives, ONGC has been able to reduce operational costs significantly. This includes strategic sourcing, effective vendor management, and adopting value engineering practices to lower expenses without compromising quality.

## 2. SAIL's Operational Efficiency:

- **Outdated Technology:** One of the major challenges for SAIL has been its reliance on outdated technology, which hampers operational efficiency. Efforts are ongoing to modernize plants and machinery to bring them up to contemporary standards.
- **Process Improvements:** SAIL is focusing on process improvements to enhance operational efficiency. This includes upgrading its production processes, implementing best practices in manufacturing, and investing in automation to reduce manual intervention and errors.
- **Labor Productivity:** SAIL faces challenges related to labor productivity due to legacy issues and labor-intensive processes. Efforts are being made to train and upskill the workforce, streamline labor practices, and introduce more efficient work methods.
- **Energy Efficiency:** Improving energy efficiency is a key focus for SAIL. Initiatives include upgrading energy-intensive equipment, adopting energy-efficient technologies, and optimizing energy use in production processes to reduce costs and environmental impact.

## 3. Comparative Insights:

- **Agility and Responsiveness:** ONGC has demonstrated greater agility and responsiveness in adopting new technologies and optimizing operations compared to SAIL. This is partly due to its organizational culture that encourages innovation and continuous improvement.
- **Financial Resources:** ONGC's robust financial health allows it to invest in advanced technologies and efficiency initiatives more readily than SAIL, which faces financial constraints that limit its ability to undertake large-scale modernization.

- **Strategic Focus:** Both organizations are strategically focusing on improving operational efficiency, but the pace and scale of implementation vary significantly. ONGC's efforts have resulted in tangible improvements, while SAIL continues to address longstanding inefficiencies.

#### IV. CONCLUSION

In conclusion, this paper underscores the importance of NPM as a guiding framework for public sector reforms in India, particularly within organizations like ONGC and SAIL. While both entities have made progress in embracing NPM principles, there remain significant challenges in achieving sustainable transformation. The findings contribute to the body of knowledge on NPM implementation in emerging economies and provide valuable insights for policymakers, practitioners, and scholars seeking to enhance public sector performance and accountability.

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