Journal of Advances and Scholarly Researches in Allied Education
Vol. 22, Issue No. 5, October-2025, ISSN 2230-7540

DOI: https://doi.org/10.29070/hxyweq05

Bridging Policy and Practice: Evaluating Urban Governance and Implementation Gaps in India's Smart City Mission - A Case Study of Delhi

Pragya Baboo [1] *

1. Research Scholar in MSc International Business Management, Kingston University, London, GB
19pragya1997@gmail.com

Abstract: One of the most comprehensive urban transformation programs in the world, India's Smart City Mission (SCM) began in 2015 with the goal of enhancing citizens' quality of life via the implementation of technology-driven governance, sustainable infrastructure, and development that is centered on them. Although it is gaining traction on a national level, the results of its implementation range greatly across cities because of variations in administrative capabilities, governance approaches, and institutional structures. The Smart City Mission in Delhi is examined in this paper, which sheds light on its complicated scenario characterized by overlapping authorities, fragmented institutional duties, and operational issues. The study analyzes the effects of Delhi's multi-layered governance structure on policy implementation, scalability, and public participation using a qualitative research approach that is based on secondary data from government reports, CAG audits, policy papers, and academic literature. The results reveal that although the Integrated Command and Control Centre (ICCC), smart mobility solutions, digital classrooms, and smart surveillance were all part of the high-visibility projects brought about by the Smart City interventions administered by the NDMC, these accomplishments are still limited to the NDMC zone, which covers only 3% of the city. The city-wide implementation was impeded by things like uncertain property ownership, limited public input, persistent administrative fragmentation, and a top-down planning strategy. Policy results are improved by unified governance, consistent community involvement, and clear institutional frameworks, as shown by comparative findings from Bhubaneswar. Delhi shows technical progress in certain areas, but the report says that overall, the city's model shows how far policy goals are from being achieved in practice. To ensure that smart city development becomes more inclusive, egalitarian, and scalable throughout India's urban environment, it is vital to strengthen inter-agency coordination, institutional capacity, participatory planning, and outcome-driven monitoring frameworks.

Keywords: Governance, CAG Audits, SCM, Policy, Bhubaneswar, ICCC

X

INTRODUCTION

The rapid urbanization in India has both accelerated the country's transition and presented formidable obstacles, altering its social, economic, and environmental landscape. As cities keep expanding and people move in closer together, governments are more concerned about issues including environmental degradation, transportation bottlenecks, housing shortages, and infrastructural deficiencies. Because they promote innovation, economic growth, and national productivity, urban zones are also important sites for development interventions (Das, D., 2025). Established within this ever-changing context, the Smart City Mission (SCM) aims to modernize urban centers via participatory governance, integrated planning, and digital technology. However, effective systems of administration and the ability to translate policy frameworks into tangible outcomes are vital for the achievement of such substantial changes. The unique

administrative complexities of Delhi provide a great case study for studying the broader issues with urban governance in India. These complexities highlight the gap between policy objectives and their actual implementation (Praharaj, S., 2021).

India's Rapid Urbanisation

India is expected to become one of the world's most fast-urbanizing nations by 2036, with an urban population of around 600 million, according to Census projections and NITI Aayog. This unprecedented growth has put a disproportionate burden on urban infrastructure services such as water distribution, transportation, housing, waste management, and information technology (Parida, D., 2021). Major cities such as Bengaluru, Delhi, and Mumbai consistently face challenges with traffic, pollution, slums, and service disparity. The ever-expanding disparity between the projected increase in population and the available infrastructure is a clear indication of the systematic problems with the city's planning and management. In order to ensure India's continued economic development and global competitiveness, it is becoming necessary, rather than just desirable, to address the complexities of urbanization (Jha, R., 2021).

Introduction to Smart City Mission (SCM)

The Indian government launched the Smart City Mission (SCM) in 2015 to tackle these intricate problems by promoting the development of eco-friendly, people-centric, and technologically advanced urban areas. The objective of this purpose is to enhance the quality of life for urban dwellers via the use of data analytics, digital technologies, energy-efficient systems, innovations in transportation, and improved service delivery (Yadav, A., 2024). In contrast to traditional city plans, the SCM places an emphasis on growth within specific areas, public-private collaborations, and initiatives that can be replicated. One of the most audacious urban changes in India, this initiative showcases 100 cities selected via a rigorous Smart City Challenge. With an emphasis on tech-driven leadership and public interaction, it signifies a shift towards more modern and accountable approaches to municipal government (Patterson, J. J., 2019).

Importance of Urban Governance in India's Growth

The success of India's economic growth depends on efficient urban management, as the country's urban areas produce more than 63% of its gross domestic product. Effective governance guarantees resilient urban planning via efficient service delivery, equitable distribution of resources, on-time project execution, and other positive outcomes (Zhang, F., 2025). On the other hand, many Indian cities suffer from bureaucratic red tape, inadequate financial independence, duplication of authority, and incompetent municipal officials. This kind of restriction reduces the efficacy of programs like the Smart City Mission (Jiang, H., 2019). The SCM aims to improve governance by introducing Special Purpose Vehicles (SPVs) and encouraging collaboration between various levels of government. Nevertheless, the effectiveness of these systems in practice will decide the final outcomes (Mugambwa, J., 2021).

Research Gap: Mixed Outcomes of SCM, Especially in Delhi

The implementation of the Smart City Mission has yielded inconsistent outcomes, despite significant investments and ambitious objectives. The CAG's audits and evaluations are only the latest in a long line of them that have shown persistent gaps between policymaking and policy execution. The situation in Delhi is

particularly intricate due to the city's multi-tiered administration and the participation of several authorities (Yadav, A., 2023). These overlapping rights lead to problems with coordination, delays in land-related approvals, and poor community engagement. A number of Delhi-based projects have hit roadblocks owing to scaling issues, lack of participation, or delays, while making some apparent headway. The current academic literature seldom touches on these implementation gaps at the municipal level, indicating a clear dearth of research on the topic (Reddy, T. V., 2022).

Research Aim, Objectives, and Methodology

Using Delhi as an example, this research aims to examine the problems with the Smart City Mission's implementation and governance. Evaluation of large-scale initiatives, identification of systemic barriers, analysis of institutional structures, and comparison of Delhi's performance to that of successful models like Bhubaneswar are the primary objectives (Kumar, P., 2014). For its qualitative policy analysis, the research relies on secondary data collected from government documents, academic journals, CAG reports, and mission guidelines (Engin, Z., 2025). This research examines the chasm between theory and practice to provide light on the challenges faced by India in its urban transformation efforts (Geier, F., 2019).

LITERATURE REVIEW

Ashutosh, (2025) Much of the recent growth in Indian literature on urban governance, policy implementation, and smart city development may be attributed to the government's ambitious Smart City Mission (SCM), which began in 2015. Investigators have examined the objective from a variety of perspectives, including governance frameworks, technological integration, public-private partnerships, citizen engagement, and implementation challenges. This literature review integrates these themes to provide a theoretical framework for evaluating Delhi's Smart City Mission. Journals like Economic & Political Weekly, Habitat International, Urban India, and the Journal of Urban Affairs are consulted in this section to highlight existing knowledge and identify areas that require further investigation, particularly in a complex administrative setting like Delhi.

Parkar, K. (2023) Much of the existing research on urban governance and policy implementation in India emphasizes the structural fragmentation and institutional shortcomings that impede effective urban administration. Urban India and Economic & Political Weekly both found that the Indian federal government and local urban entities had a significant authority and competency imbalance. Even though the 74th Amendment was intended to provide urban local governments additional authority, devolution of power is still rather limited. Numerous academics have noted that bureaucratic dominance, a lack of fiscal autonomy, and overlapping powers are some of the reasons why urban reforms fail to achieve their full potential. As part of smart city initiatives, new institutional actors are joining forces with municipal organizations via the establishment of Special Purpose Vehicles (SPVs), therefore reorganizing the government. Although SPVs mean well, they may make elected representatives useless by undermining democratic accountability and preventing their participation. Policies are delayed and inconsistent because federal ministries, the Delhi Government, the National Disaster Management Council (NDMC), the Metropolitan Council of Delhi (MCD), and the Delhi Government all divide and conquer in their responsibilities, which makes it difficult to understand how Delhi's SCM performance fits into the bigger picture of governance.

Javed, B. (2018) A major theoretical framework in the field of smart city studies, New Public Management (NPM) promotes efficiency, managerial independence, and public-private partnerships (PPPs). According to scholars, the Smart City Mission is consistent with NPM principles as it encourages government agencies to operate like corporations via the employment of SPVs. Articles in Habitat International and the Journal of Urban Affairs claim that PPP-driven models may expedite the execution of ICT projects, lead to more modern infrastructure, and improve services. Researchers like Mukhopadhyay and Kundu have shown that PPPs have enabled several Indian towns to introduce cutting-edge technologies for digital service delivery, transportation, and energy management. Critiques informed by NPM do, however, highlight some important concerns. The private sector's dominance in public governance has the potential to dilute the desired level of transparency and accountability, and public-private partnerships (PPPs) often prioritize economically or technologically oriented projects above socially inclusive ones. Several evaluations have shown that smart city efforts favor commercial zones or key business districts over neglected communities. This is why, in densely populated and socially diverse places like Delhi, NPM has to undergo a comprehensive evaluation, notwithstanding the efficiency benefits it offers.

Praharaj, S. (2018) In addition to NPM, multi-level governance (MLG) offers a different but equally valid perspective. Federal, state, and local governments work together to control common policy areas; this is what multi-level governance (MLG) theory is all about. According to scholars like Prasad and Khosla, centralised authority has traditionally had more sway in India's urban context than local autonomy, and this is true across a variety of sectors, including financing, land management, and urban planning. Due to the substantial influence of national-level regulations and funding mechanisms on local decision-making, these dynamics are made worse by smart cities, according to many studies. Rather than fostering the development of sustainable collaborative governance frameworks, the SCM's challenge-based selection process prompted communities to compete for funding, according to publications by Habitat International and Economic & Political Weekly. The problem is particularly bad in Delhi because to the city's peculiar administrative structure, where central or quasi-central agencies manage land, police, and critical infrastructure. Thus, the MLG literature provides a compelling explanation for why the mission's implementation in the nation's capital is so often hindered by institutional rivalry and problems in coordination.

Kumar, A. (2017) smart governance research focuses on using digital tools, data systems, and information and communication technology (ICT) platforms to promote transparency, efficiency, and public engagement. Global smart city ideas are starting to prioritize participatory platforms, open-data initiatives, and community co-creation, according to research in Urban India and Habitat International. Chourasia and Soni are among the writers who argue that citizens may use digital participation to have a direct impact on service delivery and urban planning. Because of this, government may be transformed. Studies done in India have shown that smart governance isn't very useful in practice. Real engagement is hindered by a combination of factors, including uneven infrastructure, a lack of digital literacy, and program designs that are imposed from on high. Especially in low-income regions and informal settlements, only a fraction of the population can engage because of the digital divide. Research on cities like Bengaluru and Pune has improved to some extent, but there is still a huge gap between planning and implementation. Public involvement was low at the proposal stage and did not result in continued engagement or shared decision-

making, according to assessments carried out in Delhi by Singh and Bansal (2022).

Luque-Ayala, A. (2015) discussion of smart city technologies, economics, and environmental issues in the evaluation of significant journals' scientific content. When studying smart city trajectories throughout the globe, Habitat International often highlights the risk of technology-led urbanization replacing social aspirations. The Journal of Urban Affairs examines the pros and cons of governance driven by information and communication technologies across many countries. Economic & Political Weekly offers critical perspectives on privatization, regional disparities, and governance reforms, while Urban India explores administrative capabilities, municipal funding, and institutional transformation. When considered together, these sources highlight the importance of the regulatory framework above the technology in determining the success of a smart city.

OVERVIEW OF SMART CITY MISSION (SCM) IN

The rapid urbanization in India has increased the need for innovative, scalable approaches to city planning. Maintaining economic and environmental resilience, providing efficient services, and accommodating burgeoning populations are all growing concerns for cities. In 2015, the Indian government announced the Smart municipal Mission (SCM), a countrywide project to improve municipal administration and infrastructure via technology, public involvement, and improved administrative coordination. This was in response to these multi-faceted difficulties. In addition to redeveloping the city's physical infrastructure, the SCM aims to reform its governing processes to be more transparent, inclusive, and environmentally friendly in the long run. The mission marks a sea shift in India's approach to urban planning by emphasising outcome-oriented governance, reproducible development models, and integrated city planning. Here we provide a thorough overview of the mission's policy framework, goals, governance structure, finance methods, selection process, and national progress, drawing on relevant government documents and assessments.

Policy Framework of the Smart City Mission

The purpose of the Smart City Mission, a nationally supported initiative announced in June 2015 by the Ministry of Housing and Metropolitan Affairs (MoHUA), was to transform selected metropolitan hubs into model cities of efficient administration and sustainable development. Its policy framework outlines a two-pronged approach: Area-Based Development (ABD), which incorporates renovation, greenfield development, or retrofitting to improve a specific area of a city; and Pan-City Solutions, which incorporates information and communication technology (ICT) upgrades to various municipal services, including transportation, power, water, and emergency response. The mission's focus on flexibility supports programs at the municipal level that are flexible and created according to national standards. The framework's stated goal is to encourage innovation and local-level planning in the hopes that communities can transform into autonomous development engines. It gives locals a hand in making their cities better by encouraging transparency and public participation at every stage of a project's lifecycle.

Objectives of the Smart City Mission

The Smart City Mission has several goals, one of which is to improve urban residents' quality of life. The major objective is to increase administrative accountability and efficiency by the use of smart technologies,

digital platforms, and real-time data systems, all with the purpose of encouraging citizen-friendly government. Second, the mission's attempt to ensure sustainable urban growth includes better transportation options, less waste, energy efficiency, and the usage of renewable energy sources. Third, it strives to increase economic competitiveness by making cities better locations to invest, develop, and start enterprises. In order to create more inclusive and resilient cities, SCM's fourth goal is to get more people involved in the decision-making process. By achieving these objectives, the purpose envisions communities that, through the application of modern government practices and technology, promote inclusive development and provide first-rate public services to all residents.

Funding Structure and Financial Model

The Smart City Mission is co-funded by the federal government, the different states of India, and the urban municipal entities. For a period of five years, the national government allots ₹100 crore to each selected city. It is expected that the state government or ULB would spend ₹100 crore year, for a total guaranteed commitment of ₹1,000 crore each city, during the mission. Communities are encouraged to seek additional funding via various means such as land value capture, public-private partnerships (PPPs), loans, municipal bonds, and collaboration with other urban plans. By reducing dependence on government handouts and encouraging innovative financing choices, this varied financial strategy hopes to achieve this aim. However, the success of this strategy varies from city to city. Bigger, more populous cities like Ahmedabad and Pune are able to garner foreign money more easily than smaller, less institutionally strong towns.

Selection Mechanism: The Smart City Challenge

Notable among the SCM's components, the Smart City Challenge acts as a competitive selection process. All city proposals were required to detail their objectives, strategies, finances, and public engagement tactics. When evaluating these proposals, the expert panel took into account factors such as feasibility, creativity, efficiency, and accessibility. Instead of relying on the traditional top-down approach, the competitive model pushed for communities to strengthen their planning capabilities and establish concrete development objectives. The mission's 100 target cities were selected following the challenge's multi-stage rollout from 2015 to 2017. This system promoted innovation, learning, and benchmarking among cities in India, leading to a more prevalent culture of performance-based municipal administration.

Governance Model: The Special Purpose Vehicle (SPV)

The Special Purpose Vehicle (SPV) is a professionally managed corporate organization that is central to the Smart City Mission's governance structure. It is responsible for planning, implementing, evaluating, and monitoring all projects linked to the Smart City Mission in each city. Each SPV is structured as an LLC in accordance with the Companies Act, and the state and the ULB each possess a majority interest. Quicker execution, more accountability, more financial autonomy, and the elimination of bureaucratic bottlenecks are the aims of the SPV model. One such SPV is NDMC Smart City Limited, which operates in Delhi. Inside the SPV framework, cities may recruit experts, interact with private sector partners, and execute flexible procurement procedures. There are democratic accountability advocates and opponents of the system. Due to their independence from elected municipal councils, SPVs, according to their supporters, weaken local participation in decision-making.

National Progress and Achievements

Since the Smart City Mission started, a lot of neighborhoods have become much better. The 7,800 projects that were approved nationwide had an estimated value of about ₹2 lakh crore, and they included smart mobility, renewable energy, public Wi-Fi networks, integrated command and control centers (ICCCs), and waste-to-energy programs, as per assessments by MoHUA and CAG. By 2023, over 70 cities had established ICCCs, which enabled real-time management of water supply, traffic, and safety in addition to emergency response. Notable examples of outstanding governance frameworks, public engagement, and inter-agency collaboration were seen in cities such as Indore, Bhubaneswar, Surat, and Pune. However, on a national scale, there is still inconsistency. A number of factors contribute to the delays that many towns face, including bureaucratic hurdles, difficulties in obtaining land, insufficient municipal capabilities, and an absence of accessible funds.

Key Policy Documents and Institutional Inputs

The Smart City Mission is backed by many policy tools that guide its implementation, monitoring, and evaluation. As an example, the Smart Cities Mission Guidelines (2015) detail the ideal system of governance, the distribution of funds, and the selection of projects. The NITI Aayog Urban Transformation Report evaluates urban challenges on a national level and provides strategies for establishing institutions at the municipal level (2020). The CAG Report on Smart City Mission (2023) takes a close look at the mission's execution and finds ways it might have been better planned, used its funds better, and finished projects sooner. The mission's direction and accountability are ensured by these documents, together with the annual MoHUA reports and dashboards at the municipal level.

CASE STUDY: DELHI SMART CITY MISSION

In the context of urban growth in India, the Delhi Smart City Mission represents a unique and complex setting. The federal level administrative framework that governs Delhi, the nation's capital, includes the following entities: the New Delhi Municipal Council (NDMC), the Municipal Corporation of Delhi (MCD), the Delhi Development Authority (DDA), the Public Works Department (PWD), the Delhi Cantonment Board, the Delhi Government, and the Union Ministry of Housing and Urban Affairs (MoHUA). In doing so, it generates both opportunities and constraints for achieving the goal. Lack of coordination, land fragmentation, and competing development goals from several authorities are major issues in Delhi, despite the city's wealth, administrative fame, and attention from lawmakers. A prime illustration of how governance dynamics impact the outcomes of national urban projects is the NDMC's work in executing the Delhi Smart City Mission (DSCM). In this article, we will examine the mission's operational architecture, its successes, its implementation challenges, and its comparison to model cities such as Bhubaneswar.

Delhi Smart City Mission Overview

The Delhi Smart City Mission is overseen by the New Delhi Municipal Council (NDMC), which was selected as an entity for the national Smart City Challenge. In sharp contrast to other cities where larger municipal corporations have a significantly greater influence, the NDMC region—which occupies a mere 3% of Delhi's total area—is home to significant administrative, economic, and institutional monuments.

Due to its small size, high wealth per capita, and better infrastructural foundation, it had an advantage in implementing smart city principles. A special purpose vehicle (SPV) called NDMC Smart City Limited is responsible for the planning, administration, financing, and oversight of smart city projects in the designated area. Unlike the more disjointed governance environment in the rest of Delhi, the mission is able to operate with administrative independence due to its organizational structure.

Central to the NDMC's Smart City concept was the implementation of citywide technological breakthroughs via Pan-City initiatives, as well as the improvement of the areas around Connaught Place (CP), Gole Market, and the surrounding institutional zones. The mission emphasized the need of smart transportation, renewable energy, waste collection, streets, schools, public spaces with Wi-Fi, command and control systems, and surveillance-based urban safety systems. Central Delhi is now a better location to live in terms of economy, ecology, and citizen convenience because to the integration of all these sections.

Table 1: Key Focus Areas of Delhi Smart City Mission

Focus Area	**Major Initiatives**	**Responsible Agency**
Smart Mobility	Smart parking, EV charging stations, traffic sensors	NDMC, Delhi Police
Energy Efficiency	LED streetlights, rooftop solar systems	NDMC, Solar Energy Corporation of India
Public Safety	CCTV surveillance, ICCC-based monitoring	NDMC
Digital Services	Public Wi-Fi, smart kiosks, e-governance apps	NDMC
Waste Management	Sensor-based bins, mechanised sweepers	NDMC
Education	Smart classrooms, digital boards	NDMC Education Dept.

The tremendous administrative capacity and huge financial resources of the NDMC were major factors in the extraordinarily quick roll-out of these projects. However, limitations emerged as a result of the mission's narrow geographical focus and its inability to achieve consistent improvements across Delhi's broader urban environment.

Achievements of Delhi Smart City Mission

Many major goals of Delhi's Smart City Mission have been accomplished, especially in the NDMC zone.

An important step forward in digitally managing public safety, surveillance, trash collection, air quality, and traffic was the establishment of the Integrated Command and Control Centre (ICCC). The ICCC integrates data from several sensors, CCTV networks, smart meters, and municipal systems, allowing for faster responses to urban issues and real-time decision-making. The system has improved public safety and operational efficiency by integrating over 6,000 CCTV cameras that feed into the ICCC. Another major success is the modernization of Connaught Place, one of the biggest business areas in India. Part of the plan was to install digital information kiosks, install smart parking solutions, upgrade the lighting, and provide more pathways for pedestrians. Congestion at busy intersections was reduced using smart traffic solutions, such as adaptive signal controls and traffic monitoring via sensors. The installation of 100% LED streetlights and other energy efficiency measures has resulted in substantial energy savings for the NDMC area.

Table 2: Selected Completed Projects Under Delhi SCM

Project Component	**Details**	**Status**
ICCC	Centralised data platform with integrated services	Operational
Smart Parking	87 parking lots digitised	Completed
LED Streetlighting	100% conversion in NDMC area	Completed
Smart Classrooms	200+ classrooms upgraded	Completed
Wi-Fi Zones	1,200 hotspots installed	Operational
CCTV Surveillance	6,000+ cameras integrated	Operational

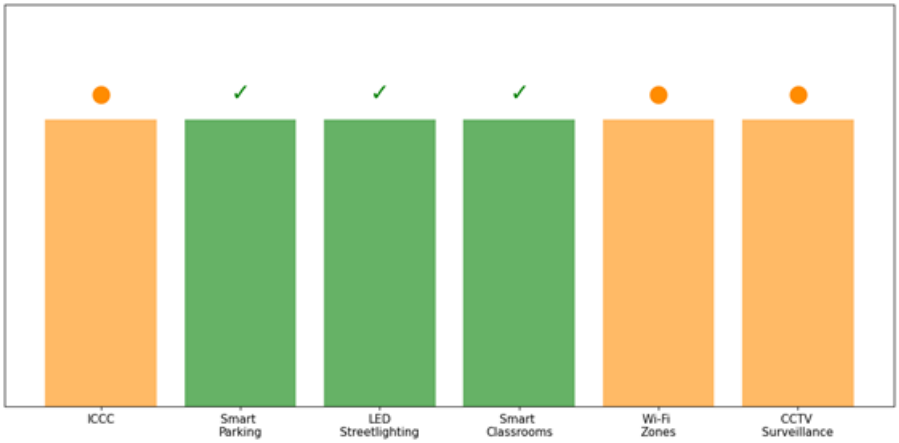

Figure 1: Delhi Smart City Mission – Completed Projects

Urban systems that are well-coordinated and have technological support may substantially enhance service delivery, as these achievements show.

Implementation Challenges

Despite considerable progress, the Delhi Smart City Mission continues to encounter several implementation challenges, a lot of which are associated with the complex administrative ecology of the city.

- **Fragmented Governance**

The administrative structure of Delhi includes the following entities: the Delhi Cantonment Board, the Delhi Government, the Central Government, the NDMC, the MCD, the DDA, the PWD, and the Delhi Government again. The disjointed nature of the system makes it difficult to determine responsibilities for things like roads, public spaces, individual parcels of property, and infrastructure. Projects that need clearance from many authorities often disrupt the NDMC's smooth functioning. The benefits of the mission can only be experienced in a limited geographic region since there has been no coordinated planning to enable scalability.

Table 3: Key Governance Overlaps in Delhi

Urban Function	Main Agencies Involved	Nature of Overlap
Roads	NDMC, PWD, Delhi Traffic Police	Maintenance and traffic control
Land	NDMC, DDA, MCD, Ministries	Ownership disputes
Utilities	DJB, NDMC, DISCOMs	Supply coordination
Public Spaces	NDMC, MCD	Waste, vending zones

- **Land Ownership Issues**

  The division of land is a major problem since different government agencies, such as the DDA, possess large swaths of it. Projects requiring land removal will experience substantial delays. For instance, smart transportation corridors and greenfield redevelopment projects faced significant challenges due to unclear ownership arrangements.

- **Citizen Participation Challenges**

  The level of citizen engagement in Delhi has been inconsistent, despite its importance. A lack of inclusiveness occurred because NDMC's digital consultations did not include enough people from lower-income backgrounds, street vendors, and informal workers. This biased input affects the prioritizing of projects and the level of inclusion.

- **Digital Divide**

  Populations without sufficient access to cellphones and reliable internet, or with low levels of digital literacy, may be left out of technological interventions. Urban inequality is worsened since although the NDMC region has relatively high internet penetration, many people outside of this zone remain disconnected.

- **Delays and Cost Overruns**

  The project was delayed due to an assortment of factors, including issues with procurement, frequent administrative changes, and conflicts amongst agencies. Inflation, design modifications, and coordination challenges all contributed to several initiatives' final costs being higher than anticipated. The findings of CAG indicate that bureaucratic red tape caused many projects in Delhi to develop at a slower-than-average pace.

Comparative Insight: Delhi vs Bhubaneswar

Comparing Delhi with well-functioning smart cities, like Bhubaneswar, could teach us a thing or two about public engagement and government. Among the factors that have helped Bhubaneswar maintain its position as a leading smart city is its excellent institutional coordination, well-thought-out transit plans, and welcoming community participation. In contrast to Delhi, Bhubaneswar's more cohesive administrative structure allows the Area-Based Development and Pan-City projects to roll out more easily. Bhubaneswar Smart City Limited, a special purpose entity, established robust partnerships with philanthropies, academic institutions, and corporations in the transportation, public space, and digital governance sectors. On the other hand, issues in Delhi include bureaucratic red tape, lengthy approval procedures, and ambiguous authority. The broader metropolitan region lacks cohesion in its administration, notwithstanding NDMC's impressive progress inside its borders. Delhi should take a page out of Bhubaneswar's playbook when it comes to making smart city efforts more accessible and scalable: a unified strategy, proactive stakeholder participation, and situational planning.

Table 4: Comparative Performance: Delhi vs Bhubaneswar

Parameter	Delhi (NDMC Area)	Bhubaneswar
Governance Structure	Highly fragmented	Unified ULB
Citizen Participation	Moderate	High
ICCC Integration	Strong	Strong
Area Coverage	Limited (3%)	Citywide vision
Project Completion Rate	Medium	High

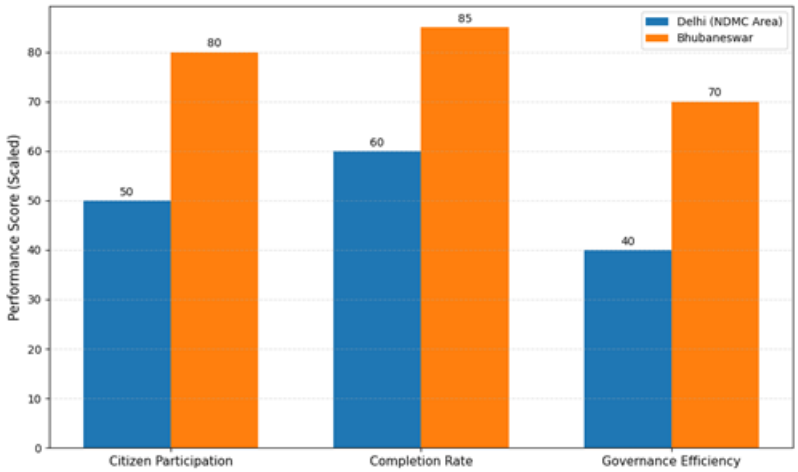

Figure 2: Comparative Performance: Delhi vs Bhubaneswar

ANALYSIS AND DISCUSSION

The Smart City Mission (SCM) in Delhi is influenced by a wide range of elements, such as the city's socioeconomic situation, the collaboration between institutions, the formulation of policies, and the systems of governance. The mission's stated purposes and performance are clearly at odds with one another, despite claims of efficiency, sustainability, and development focused on citizens. To get a better understanding of the mission's contrasting results in Kolkata, India, we may refer to major theoretical frameworks such the Equity-Inclusion Debates, New Public Management (NPM), Pressman and Wildavsky's Implementation Theory, and Governance Theory. Pressman and Wildavsky's implementation technique posits that, rather than flawed policy formulation, the true cause is an overabundance of "decision nodes" and players. In Delhi, for instance, public and private entities worked together under the Smart City Mission, which required the MoHUA, the Delhi Government, the NDMC, the MCD, the DDA, the PWD, and private contractors. With each approval or clearance, the chances of a lag, distortion, or disagreement increased.

The geographic scope of SCM programs was limited because of the ambiguity surrounding land, transportation, utilities, and public space commitments, which was caused by many overlapping agencies. The mission's scope did not extend to the rest of Delhi, whether it was under the jurisdiction of MCD or the influence of DDA; NDMC could only implement projects within its restricted power. The reason Delhi's SCM failed in implementation, according to the execution side, was not a lack of vision, but rather a highly hierarchical and fragmented administrative environment.

Governance Theory provides further insight by illuminating the manner in which responsibility relationships, networks, and institutions impact city results. The administrative structure of Delhi is disjointed, centralized, and vulnerable to political contestation, even though contemporary governance advocates for decentralization, integrated planning, and collaborative decision-making. The majority-controlled MCD has financial and institutional instability; in contrast, the federally-reporting NDMC is both powerful financially and administratively, and it has no trouble meeting its financial responsibilities. Since the government in Delhi only manages vital public services—not land or police—the city's structure is disjointed. In this instance, the NDMC Smart City Ltd. failed to achieve its intended goal of streamlining decision-making by failing to resolve jurisdictional issues or integrate city-wide planning. This resulted in the separate implementation of projects rather than the promotion of coordinated urban development. The Delhi SCM trajectory is consistent with the recommendations of Governance Theory, which assert that shared planning frameworks, strong horizontal coordination, and accountability at the vertical and horizontal levels are necessary for smart city projects to achieve systemic change.

The strengths and weaknesses of the Smart City Mission are shown by the New Public Management (NPM) viewpoint. The principles of NPM, like as efficiency, outsourcing, managerial autonomy, and public-private partnerships, were considered throughout the construction of SPVs. This approach proved fruitful; for instance, PPPs facilitated the rapid installation of smart parking, ICT-based monitoring, LED street lighting, and command-and-control systems in Delhi, demonstrating the nimbleness, inventiveness, and efficiency of NPM. The problems with NPM, however, are as glaring. In their pursuit of efficiency, models often disregard community feedback, undermine democratic accountability, and relegate socially inclusive activities to a lower priority. In Delhi, residents, especially those living in informal settlements or on the periphery, had little say in decision-making processes that primarily included officials and specialists. Governments led by NPMs face the risk of seeing city planning as an administrative duty rather than a public benefit, as seen by many SCM projects that prioritized technical genius above social necessity.

The inclusion and equity debate heightens these concerns by asking, "smart for whom?" The main areas where SCM investments in Delhi occurred were at Connaught Place, Gole Market, and the zones around the National Distribution Metro (NDMC). These areas have high earnings and excellent service. Given the districts' already-good urban infrastructure, some were concerned that the mission would make spatial disparity even worse. It is more difficult for ICT-based solutions to be available to everyone in Delhi due to the fact that many people do not own cellphones, do not know how to use computers, and do not have reliable internet. Furthermore, due to the top-down nature of the process, residents were not actively engaged in the selection of SCM initiatives beyond initial conversations. The major activities of the mission were therefore unable to reach the informal settlements and low-income regions. No citywide overhaul was

intended; instead, concentrated "islands of smartness" were to be the end product.

When several lines of analysis are brought together, the constant gap between policy objectives and their actual execution becomes apparent. One of the aims of the Smart City Mission was to improve service delivery while simultaneously making cities more sustainable and inclusive. In Delhi, however, its execution was impeded by political disputes, insufficient public participation, fragmented administration, inadequate coordination, and an absence of local empowerment. The policy's implementation was sluggish, consultant-driven, and geographically constrained, even though it demanded transparency, involvement, and integration. The advantage accrued to downtown regions rather than low-income neighborhoods. Thus, the Delhi instance proves Pressman and Wildavsky's main point: an overly complex administrative system may derail even the most meticulously calculated strategies. In order for the urban reforms in India to achieve its revolutionary goals, it is crucial to address the limitations of structural governance, as shown by the lessons learnt from the SCM.

LESSONS AND POLICY RECOMMENDATIONS

The Smart City Mission (SCM) in Delhi offers a number of valuable insights that might be used to better urban management and to bridge the gap between planning and execution. The implementation of smart city concepts in Delhi, which involved specific technological upgrades and infrastructure improvements, demonstrated the need for institutional coherence, administrative capability, and citizen-driven procedures in order to realize the concept's transformative potential. The issues plaguing Delhi are representative of broader structural issues that impede urban development initiatives throughout India. The main policy suggestions that have surfaced from this case study revolve around enhancing mechanisms for learning between cities, shifting to evaluation based on outcomes, instituting citizen co-creation, increasing municipal capacity, and strengthening inter-governmental coordination in order to make smart urban transformation more inclusive, efficient, and sustainable.

One of the most significant things to take away from what happened in Delhi is how crucial it is for governments to work together more. The capital's governance structure is multi-tiered and intricate, including the National Democracies of Delhi (NDMC), Madhya Pradesh (MCD), Delhi (DDA), and the national government of India (PWD). Multiple facets of city administration are overseen by these organizations. This overlapping jurisdiction also restricted the geographical breadth of SCM interventions due to administrative bottlenecks, approval delays, and complex land management. To overcome these challenges, future smart city programs would need structured coordination mechanisms backed by clear mandates. With the support of digital project monitoring dashboards, established dispute resolution processes, and interagency working groups, departments may be able to work together more successfully. Smart city projects, such as mobility plans, sustainability frameworks, and Master Plans, would benefit from better coordination and less duplication if they were part of broader strategies for urban development. With improved coordination, Delhi may move away from project-based interventions and toward an integrated plan for city transformation.

Equally important is the need for robust capacity development inside municipal entities. Delhi, like every other urban local body in India, suffers from a lack of technical expertise, management competence, and financial planning capacity—regardless of NDMC's relatively greater skill. Data analytics, public relations,

project management, participatory processes, and the integration of information and communication technologies are all crucial for smart government. In order to improve the competency of municipalities, a structured, multi-level training program is required. The answer may include specific professional development programs and methods for lateral recruitment specialists in domains such as digital infrastructure, urban design, and systems management. Expanding initiatives like the National Urban Learning Platform (NULP) and encouraging reforms among municipal cadres may considerably strengthen the institutional resilience needed to carry out complex urban projects.

Additionally, it is crucial to include citizen co-creation into the smart city process throughout. Residents, particularly those living in outlying areas and informal settlements, were not sufficiently involved because the SCM in Delhi mostly used a top-down strategy. Evidence from throughout the world shows that inclusive smart cities need to include participatory budgeting, community dialogues, digital crowdsourcing tools, neighborhood advisory committees, and open data systems. Collaborative creation strengthens trust, increases project sustainability, and verifies that choices are grounded in real community needs by bringing together stakeholders. Delhi can ensure that smart projects serve a much larger and more diverse public by shifting from symbolic consultations to institutionalized involvement in project selection, monitoring, and assessment.

Policymakers should also seriously consider shifting from an output-focused monitoring framework to an outcome-based evaluation system. Since the current method evaluates success based on the quantity of completed projects or the proportion of funds used, we are unable to determine whether these interventions have enhanced digital inclusion, quality of life, environmental performance, or equity. The success of an outcome-based strategy depends on the definition of precise measurements pertaining to topics such as service delivery, citizen satisfaction, environmental health, and transportation efficiency. To provide transparency and accountability, the governance system should routinely include open-data portals, independent audits, third-party evaluations, and citizen report cards. Instead of focusing on monitoring, integrated command and control centers should focus on improving services to ensure technology enhances public welfare in measurable ways.

CONCLUSION

A closer look at Delhi's Smart City Mission (SCM) reveals deeper issues with India's city planning and policies. According to the investigation, the mission's original goals—which included improving urban service delivery, fostering technological innovation, creating a government that is centered around citizens, and ensuring sustainable infrastructure—were ultimately hindered in Delhi by entrenched administrative and institutional barriers. Results showed that although the mission did improve public spaces, install smart traffic systems, and establish a central command and control center, these improvements were area-specific and had little to do with the city's larger developmental requirements. This paper emphasizes that one of the main issues in Delhi's administrative environment is the ongoing fragmentation of government. The overlapping roles of the NDMC, MCD, Delhi Government, DDA, PWD, and central ministries led to lengthy decision-making processes, scattered accountability, and difficult coordination. The revolutionary promise of the Smart City Mission was diminished by incoherent political objectives, bureaucratic red tape, and a government that was not cohesive. Delays, inconsistencies, and limited scalability in implementation

result from a lack of alignment between policy design and on-ground execution.

Not only that, but the Delhi case highlights how urban policy-making has to transform from being largely focused on a top-down administrative paradigm to being much more bottom-up and inclusive. Consultants and administrative interests dominated most of the mission's efforts, leaving little space for input from low-income and informal settlement dwellers, civil society groups, or local communities. Project choices that placed technologically appealing solutions ahead of more vital concerns like affordable housing, mobility justice, or environmental resilience happened often owing to a lack of substantial public input, which reduced the social legitimacy of the objective. Thus, in order to avoid the benefits of smart cities from being hoarded in wealthy regions or central business districts, an inclusive urban plan needs to transcend beyond digital technology and actively embrace participatory governance processes. Finally, India's discussion on sustainable urbanization in the long term benefits tremendously from the lessons learnt in Delhi's Smart City Mission. Coordinated, robust, and equitable city development is of the highest significance owing to the country's continued rapid urbanization. In addition to technical developments, other factors that will determine the success of India's urban transformation in the future include the following: the development of cooperative federalism, the adoption of outcome-based assessment frameworks, the institutionalization of citizen co-creation, and the strengthening of municipal capacities. Thus, the lessons learnt in Delhi may guide future national urban projects, making sure they are community-driven, anchored in local circumstances, and in accordance with the country's wider aims of economic vitality, inclusiveness, and sustainability. For this reason, constructing smart, responsive, equitable, and future-ready communities demands narrowing the gap between policy ideals and implementation realities.

References

1. Das, D. (2025). A Decade of Smart Urbanism in India through the Smart Cities Mission (SCM). Space and Culture, India, 12(4), 6–9.
2. Praharaj, S. (2021). Area-Based Urban Renewal Approach for Smart Cities Development in India: Challenges of Inclusion and Sustainability. Urban Planning, 6(4).
3. Parida, D., (2021). An evolutionary perspective on smart city governance in India. Sustainable Cities and Society.
4. Jha, R. (2021). Smart City Mission: Issues and Challenges, India. National Institute of Urban Affairs.
5. Yadav, A., Anwer, N., Mahapatra, K., Shrivastava, M.K., & Khatiwada, D. (2024). Analyzing the Role of Polycentric Governance in Institutional Innovations: Insights from Urban Climate Governance in India. Sustainability, 16(23), 10736.
6. Patterson, J. J. (2019). Institutional innovation in urban governance: The case of climate change governance. Local Environment, 24(9), 773–789.
7. Zhang, F. (2025). Governing the smart city and smart governance. City, Territory and Architecture.
8. Jiang, H. (2019). Smart Urban Governance: Governing Cities in the “Smart” Era (Doctoral thesis).

Utrecht University.

9. Mugambwa, J., et al. (2021). Policy Implementation: A Review of Selected Literature. In Governance and Sustainable Development.
10. Yadav, A., Shrivastava, M.K., & Anwer, N. (2023). The Emergence of Polycentricity in Urban Climate Governance: Lessons from Cities in India. Sustainable Built Environment and Urban Transition Conference Proceedings.
11. Reddy, T. V. (2022). Urban Governance and Smart Cities in India: Challenges, Opportunities, and Future Prospects. International Journal of Modern Engineering Research, 11(9), 258–263.
12. Kumar, P., & Kumar, D. (2014). ICT in Local Self Governance: A Study of Rural India. Procedia – Social and Behavioral Sciences.
13. Engin, Z., Crowcroft, J., Hand, D., & Treleaven, P. (2025). The Algorithmic State Architecture (ASA): An Integrated Framework for AI-Enabled Government. arXiv.
14. Geier, F., Barfuss, W., Wiedermann, M., Kurths, J., & Donges, J. F. (2019). The physics of governance networks: Critical transitions in contagion dynamics on multilayer adaptive networks. arXiv.
15. Ashutosh, & Chaudhary, A. (2025). Smart Cities and Urban Sustainability in India: A Contemporary Perspective. Research Review International Journal of Multidisciplinary, 10(5), 310–316.
16. Parkar, K., & Lama, S. T. (2023). Introduction: The Digitalization of Urban Governance in India. South Asia Multidisciplinary Academic Journal, 30.
17. Javed, B., Khan, Z., & McClatchey, R. (2018). An Adaptable System to Support Provenance Management for the Public Policy-Making Process in Smart Cities. arXiv.
18. Praharaj, S. (2018). Towards the Right Model of Smart City Governance in India. Smart and Sustainable Planning for Cities and Regions. WIT Press.
19. Kumar, A., & Randhawa, A. (2017). Exploring Livability as a Dimension of Smart City Mission (India). International Research Journal of Engineering and Technology.
20. Luque-Ayala, A., & Marvin, S. (2015). Developing a Critical Understanding of Smart Urbanism? Urban Studies, 52(12), 2118–2136.
21. Howlett, M., & Ramesh, M. (2003). Studying Public Policy: Policy Cycles & Policy Subsystems (2nd ed.). Oxford University Press.
22. Pressman, J. L., & Wildavsky, A. (1984). Implementation: How Great Expectations in Washington Are Dashed in Oakland (3rd ed.). University of California Press.
23. Goggin, M. L., Bowman, A. O'M., Lester, J. P., & O'Toole, L. J. Jr. (1990). Implementation Theory and Practice: Toward a Third Generation. Scott, Foresman and Company.

24. Yadav, S. (2010). Public Policy and Governance in India. International Journal of Public Administration, 33(13–14), 712–731.

25. Meijer, A., & Bolívar, M. P. R. (2016). Governing the Smart City: A Framework for Smart Urban Governance. International Review of Administrative Sciences, 82(2), 392–408.