The Smart City Concept and its Challenges in India

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Abstract: In the last 20 years, the world economy has shown fast progress towards globalization and urbanization around the world. Urbanization reflects the shift in employment from the agricultural to the industrial and service sectors which is a prerequisite for economic growth. The growth rate of the urban population is increasing very fast due to better living standards and higher employment opportunities in urban areas. Smart cities have been determined as a solution to cater for these problems where the technology will integrate with all city components to provide a good quality of life. As a result, India must properly plan for rethinking and restructuring its existing cities, and the construction of new cities using cutting-edge technology over the decade. This chapter tries to evaluate the essence of smart cities from the Indian context. It describes how urbanization in the world has forced India to think of smart cities. It also describes what was the need for smart cities and how the 100 smart cities were selected in India. This paper then evaluates the Indian smart cities mission based on six parameters, i.e., financing, coordination between the center and the states, master plan, time frame, facilities, and corruption. In the end, certain recommendations are being made to make the Indian Smart Cities Mission successful soon.

Keywords: Smart Cities, Smart City Mission, Smart Living, Smart Citizens, Indian Smart Cities, Urbanization.
JEL: O11, Q01, Q3, R11, R5

1. Introduction

The rise in urbanization has led to a rise in the need for smart cities. Urbanization is the process of concentrating people in densely populated settlements where many people earn their living from non-primary occupations. In recent times, urbanization has been viewed as an indicator of modernization and one of the main factors that reflect growth. Urbanization is a reflection of the shift in employment from the agricultural to the industrial and service sectors which is a prerequisite for economic growth. The natural rate of population growth is one of the primary drivers of urbanization (Chaudhuri, 2001). The more developed and less developed nations diverged significantly in the pattern of urbanization. The industrial revolution of the 19th century significantly accelerated urbanization in developed nations. When compared to developed nations, urbanization in developing nations began around the time of the industrial revolution and continues to expand at a fast rate (Development of Economic and Social Affairs, 2011).

As we move toward urbanization, the requirement for smart cities increases. Albino et al. (2015) claim that smart cities are very hard to define as so many terms are used to describe them, despite the fact that the term "smart city" is utilized more frequently than any other. However, its definition is still unclear, particularly given that a number of related terms are frequently used interchangeably. Albino et al. (2015) use a method based on a comprehensive literature review of relevant studies and official documents of international institutions to explain the meaning of the word "intelligent" in the urban context. Additionally, it identifies important aspects and dimensions of a smart city. Chun et al. (2011) found the use of the latest strategies and technologies to make a smart city. They found that there are three such factors that help in making a smart city, viz. technological factors, human factors, and institutional factors. Chun et al. (2011) also identified technology, people, and institutions as the three main components of a smart city. They formulated that there are common multidimensional components like technology that make a smart city, then there are core factors like people that are helpful in smart city implementation, and lastly, there are some specific factors like institutions related to the cities for making them smart. Al-Hader et al. (2009) have framed a smart city development pyramid based on the technological components in the form of a smart interface, smart control systems, and smart database resources. Florida (2018) stressed the role of smart people making a city smart. The strategic tenets address the issues of governance for institutional improvement and citizen engagement, integration of infrastructures and

technology-mediated services, and social learning for strengthening the human infrastructure as a base for smart city development.

This chapter will try to evaluate the essence of smart cities from the Indian context. It describes how urbanization in the world has forced India to think of smart cities. It describes what was the need for smart cities and how the 100 smart cities were selected in India. Then this chapter also tries to evaluate the Indian smart cities mission.

1.1 Urbanization and Smart City

Goodspeed (2015) defines the smart city as the outcome of technological developments which are required to make urban life of individuals easy and also planning of these lives for sustainable living. The definition and the purpose of smart cities are very confusing as per the previous studies, and they lack clarity on what a smart city should be. Goodspeed (2015) proposed a different angle on urbanization and smart city by the way of socioecological theory. According to him, the various problems of urban cities can be solved by keeping certain assumptions related to the nature of the urbanization problem. A large variety of problems were addressed during the initial phase of urbanization and hence the development of smart cities. Two major areas were identified, i.e., planning the local municipal problems using the latest available technology and collaborating the municipality planning with urban planning. Most of the time, the advancements in technologies have led to the advancement of urbanization. Smart cities are the result of the advancement in technologies (Cross, 2001; McCombs et al., 2014).

Since the introduction of the digital revolution, the various things involving people living, working, playing, and using various sources of entertainment have also changed (Hevner and Chatterjee, 2010a). The various products based on information technology (IT) and IT-enabled services to play a vital role in changing the way to use the products more effectively. The environments created by these products are more engaging for the citizens. In this new world, designing interaction is difficult.

The kind of experience we get playing mobile games, selling, or buying goods over the internet, surfing the internet, or simply visiting certain shopping websites, is unmatched. Designing the environments to use these experiences is more challenging.

According to Cross (2001), whenever research is being designed it is based on a variety of disciplines. Likewise, information and communications technology (ICT) also has various concepts from various disciplines. In contrast, information systems are made up of hardware, software, and human interfaces that are mutable and adaptable by nature. As a result, they have many unique and difficult design problems that necessitate new ideas (Cross, 2001; Hevner and Chatterjee, 2010b).

1.2 From Urbanization to Smart Cities in India

India's economy is heavily influenced by its urban areas, like that of most countries. Indian cities are expected to grow from 282 million to 590 million people over the next two decades, with cities hosting a larger portion of the population, receiving the majority of foreign direct investment (FDI), and contributing approximately two-thirds of the country's economic output. India's cities and towns have expanded rapidly as more people seek economic opportunity in them. India has the world's 10th-largest economy despite having the world's second-highest population (Urbanization in India, 2011). According to Madakam and Ramaswamy (2015), even though urban areas contribute 70 percent of the GDP, the same percentage is spent on urban development.

In the Indian context, for the best economic growth, it needs to focus more on the ever-expanding sectors like infrastructure, hospitals, tourism, information technology, foreign direct investments, and research and development under the various models like the Public Private Partnership (PPP) model, foreign collaborated higher education systems, service industries, and e-government. As a result, India needs to focus on building 100 smart cities in the coming years and increasing GDP (Smart Cities Are Cities That Work, 2014).

1.3 The Need of Smart Cities

Understanding the factors that initially draw people to a city are essential. These reasons cannot be generalized because they would differ greatly depending on the city and population at large. Some cities draw people because they offer opportunities as markets and manufacturing centers, while others do so because of the greatness of their cultures or their cosmopolitan vibes. Other cities also draw people because they can provide better health care and education facilities or a combination of these and other factors.

There are primarily two types of factors that draw people into cities, i.e., push factors and pull factors. Push factors which are driven by distress or scarcity in their home region and include droughts, violence, social rifts, and other similar issues. Whereas the pull factors refer to improved opportunities for education, industry, leisure, art, and culture (Myeong et al., 2021).

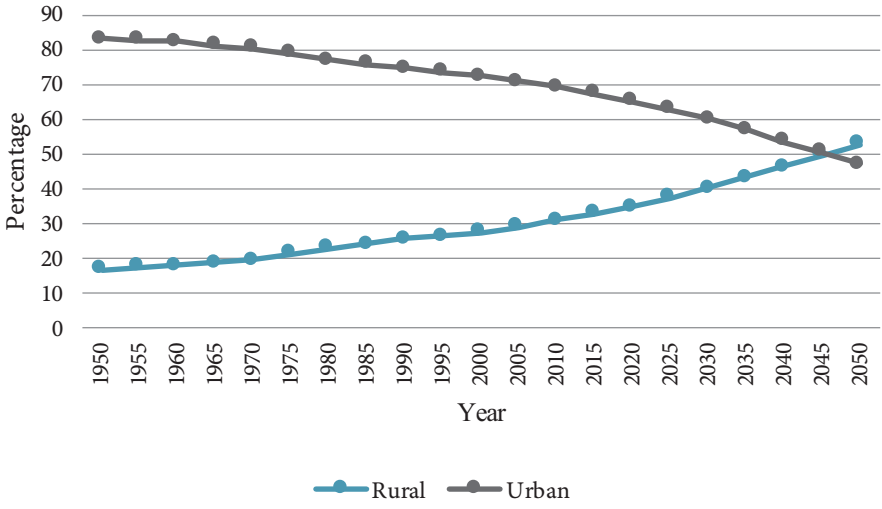
Understanding a city's DNA (the fundamental building blocks that drive the city) requires decoding the specific reasons why people choose one city over others. These reasons must be investigated within the relevant contexts because the aspirations of a city's inhabitants change over time. The various communities that make up the city, their current needs, how those needs change over time, their hopes and aspirations, what draws outsiders to the city, and other pertinent questions must be asked by practitioners of smart cities in order to comprehend these reasons (Smart Cities are Cities That Work, 2014).

If a city helps its residents achieve their goals, it is said to work for them. If someone were a migrant who was in the city for two years because of their job, they would want to have access to decent rental housing, efficient public transportation, recreational areas, and other facilities. However, if a person is a student, they may have concerns about the availability of reputable educational establishments and infrastructure for safe cycling and walking. This is not the same as what an elderly person needs, who may place more importance on having access to high-quality healthcare than anything else (Big Ideas to Achieve Sustainable Cities and Communities, 2018). It is obvious that not all people or groups of people want the same things. A city is helpful to the group, to the diverse needs expressed by a city's residents, which can be placed into three broad categories: livability, economic ability, and sustainability. This makes it easier to comprehend the variety of needs. Consider these to be three computer folders containing a variety of files covering a variety of topics. Thus, these are the three major outcomes that a city must aim for in order to benefit its residents. Ingwersen and Serrano-López (2018) have put it another way to answer the question "what is a smart city?" They have defined a smart city as a city that is livable, sustainable, and has a thriving economy. The smart city gives its residents numerous opportunities to pursue a variety of interests.

Cities provide their residents with numerous opportunities for employment, economic growth, improved living conditions, etc., and as a result, people move from rural areas to urban areas. Because almost 54 percent of the world's population resides within 4 percent of the planet's surface, this constant migration

over time has resulted in densely populated and congested cities. In addition, it is anticipated that 70 percent of the world's population will live in cities by 2050 (Kaluarachchi, 2022). Because cities produce three-quarters of the world's waste and pollution and consume nearly three-quarters of the world's natural resources, this urbanization is also causing concern. India's urbanization is also expanding at an unprecedentedly rapid rate. In the next 20–25 years, the urban population will be estimated to double to approximately 600 million. India's towns and cities are expected to nearly double to 814 million people by 2050, according to the United Nations (UN). Over 60 percent of India's GDP is generated by the urban population, which is expected to grow to 70 percent over the next 15 years (Report on Indian Urban Infrastructure and Services, 2011). The expansion of both urban and rural populations is depicted in Figure 1.

Figure 1: Population in rural and urban areas of India



Source: Adapted from Department of Economic and Social Affairs Population Dynamics, 2018.

2. Review of Literature

Every nation in the world is making an effort to provide its citizens with cutting-edge facilities and amenities. As the need and demand rise, all countries are doing various efforts to establish true smart cities or convert existing cities into

smart cities. The majority of nations are making an effort to provide their citizens with facilities of a world-class standard, and India is also preparing to achieve success with its smart city project (Chatterjee et al., 2018). In order to achieve this goal, departments from both the private sector and the government are attempting to work together. If IT-enabled services of the highest quality are to be offered, and the Indian smart city dream is to become a reality, numerous diverse factors must be taken into consideration.

Despite the numerous studies on information technology-enabled privacy and security issues, still there exists a lot of gaps that bring in trust in the citizen's minds. Manimuthu et al. (2021), found that there are two primary considerations in the context of smart cities, viz. the level of expertise of the internal staff to develop the model and the various kinds of support services in the proposed smart cities, as well as citizen participation in using these services, with a focus on security and privacy.

As we move through the stage of urbanization, the whole world needs to face the opportunities and threats that are being posed by the rising population, the depleting resources, and the drastic changes in the demographics and climate. India is not an exception to these, as the more populated a country is, the more serious are these threats. All its metropolitan cities, viz. Delhi, Mumbai, Kolkata, Bengaluru, and Chennai are facing a severe need for urbanization and smart cities. On the same lines, the classified Tier-II cities also require major reforms in the context of urbanization (World Population Prospects, 2018). Both Tier I and Tier II cities are facing drastic social issues as a result of the environmental issues raised by rapid reforms in urbanization (India's Urban Challenges, 2015). These issues could have been the result of a lack of proper governance, illegally built slums in open areas, a lack of gas and electricity, inadequate and ineffective medical services, or high urban densities (Venkatesham, 2015). In India, many infrastructure systems developed for its citizens including water supply, water drainage, water harvesting, and solid waste treatment and management are experiencing a significant number of challenges as the reforms take place.

Housing has been the most pressing issue in all cities due to the sudden and massive influx of migrants from rural areas to urban areas. According to Busscher and Doody (2010), there is also a strong influence from various criminal networks, a high rate of unemployment, and a lack of infrastructure in the majority of major cities. For Smart Cities, an initial investment of 70,600 million Indian Rupee was made (Report on Indian Urban Infrastructure and Services, 2011).

These smart cities also have the potential to cut down on global warming. India is striving hard to raise the standard of living and provide all facilities to its citizens. It is hoped that India will soon provide its citizens with a quality of life that will be on a par with other smart cities of the world such as on European and American continents (Madakam and Ramaswamy, 2015).

Another important problem that has arisen as a result of the enormous increase in the population is the enormous amount of solid waste that is produced. Air pollution and traffic congestion are there in the majority of Indian cities. Poverty-motivated migration has contributed to very poor planning and management of urbanization which has been followed by a rise in misery, higher rate of poverty and unemployment, exploitation of the workforce, more development of slums, high rise in inequality among its citizens, and a decline in urban residents' quality of life (Sen, 2014).

According to Vanolo (2014), it was emphasized that India should construct 500 more cities if it does not want its existing cities to become slums. In addition, Harrell (2016) found that in every minute in India, 30 people move toward cities from rural areas for a better life, and work opportunities. In order to accommodate 700 million more people who will live in cities by 2050, the nation is planning to build more than 500 cities in the next two decades (Ahluwalia, 2011). Smart cities have been determined to be a solution to cater for these problems where the technology will integrate with all city components in order to provide a good quality of life. As a result, India must properly plan for rethinking and restructuring its existing cities, and the construction of new cities using cutting-edge technology over the next decade (Ahluwalia, 2011).

3. The Objectives of the Study

The present study has been carried out to study how the need of urbanization has led to smart cities in India. The study formulates the following objectives:

- to study the need of Smart Cities,
- to explore the Indian Smart Cities Mission,
- to explore the challenges faced by the Indian Smart Cities Mission, and to address the way forward.

4. Research Methodology

Exploratory research was the choice of method that best suited this study. This method did not only help formulate or define the problem, but also helped to isolate key variables to gain more insight into the problem. The research design was qualitative in nature which helped refine the existing information about smart cities, enhance its readability, and minimize the chances of being misinterpreted. The research philosophy has been a blend of both positivism and phenomenology. The secondary data collected for the present study was critically examined based on specifications, accuracy, objectives, and nature to identify possible sources of bias.

5. Indian Smart Cities Mission

5.1 Features

The goal of the Smart Cities Mission is to promote cities that provide core infrastructure, provide decent living conditions for their residents, maintain a clean and sustainable environment, and employ "smart" solutions (Dameri, 2013). The idea is to examine compact areas and develop a replicable model that will serve as a beacon for other aspiring cities. The focus is on sustainable and inclusive development. The government's Smart Cities Mission happened to be a bold new initiative. Its goal was to serve as an example that can be followed both inside and outside the smart city, resulting in the establishment of other smart cities that are similar to this idea across the nation (Chakraborty et al., 2021).

A smart city's core infrastructure would include reliable electricity and water supply, housing for all, sanitation, and solid waste management. It also stresses robust IT connectivity and digitalization, good governance, particularly e-Governance, citizen participation, a sustainable environment, citizens' safety and security, health, and education (Rana et al., 2019).

The following objectives are considered for the development of Smart Cities:

Figure 2: Objectives of India's Smart Cities Mission

Source: Adapted from Smart City Features, 2011.

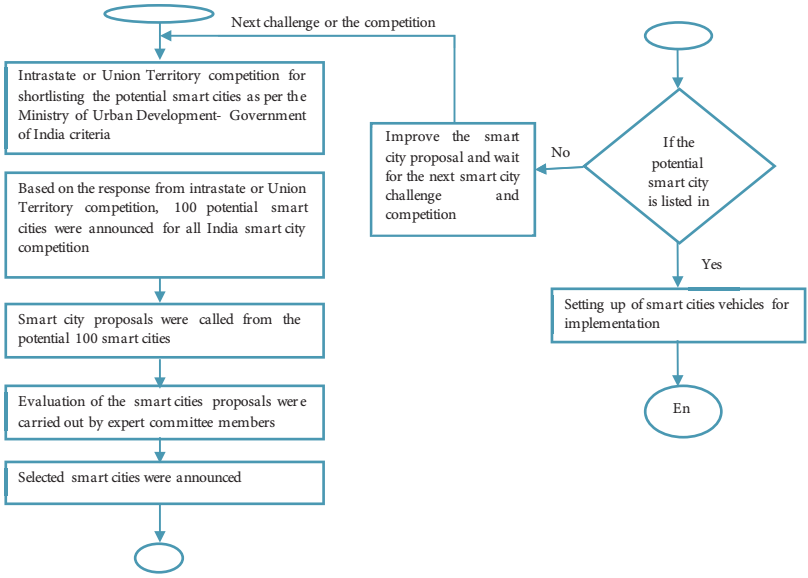
1. Planning for "unplanned areas" that contain a variety of interconnected activities and use the land that is compatible with one another and is close to one another. The overall purpose is to make land use more efficient which is also called encouraging mixed land use in area-based developments. States will permit some adaptability to changes in land use and building regulations;
2. housing and inclusion: make housing more accessible to its residents;
3. efforts should be made to reduce traffic congestion, reduce air pollution and depletion of various vital resources, boost the local economy, encourage interaction, and guarantee safety by creating walkable communities. Not only is the road network constructed or improved for automobiles and public transportation, but also bicycles, pedestrians, and bicyclists; in addition, all the necessary services should be within the reach of all which means they do not need to travel much for benefiting from these services;
4. conserving and expanding open spaces such as parks, playgrounds, and recreational areas to improve citizens' quality of life, and make an effort to reduce the effects of urban heat on areas, and generally encouraging eco-balance;
5. promoting a variety of available transportation options, including public transportation, last-mile para-transport connectivity, and Transit Oriented Development (TOD);
6. making governance more cost-effective and friendly to citizens by relying more and more on online services to bring about accountability and transparency, particularly by using mobile devices to lower service costs and provide services without visiting any government office; create e-groups to listen to its residents

and collecting feedback, use a virtual tour with the help of the latest technology of various workplaces, and to monitor all programs and activities;

7. establishing the city's identity based on its primary economic activities, such as local cuisine, health, education, arts and crafts, culture, sports goods, furniture, hosiery, textiles, and dairy, among others;
8. in area-based development, improving infrastructure and services through the use of smart solutions. For instance, making disaster-prone regions less vulnerable, consuming fewer resources, and offering services at lower prices.

5.2 Process

Figure 3: Process of Smart City Selection



Source: Author's compilation from a review of literature.

The process started with the state itself. The state shortlisted the cities as per the criteria laid down by the Ministry. After evaluation of the various cities those found suitable on the criteria were seen and evaluated. Based on that, 100 potential smart cities were announced. Then these 100 cities were called to submit proposals on how they can make their city a smart city. The submitted proposals were evaluated by the committee constituted by the government to see their feasibility

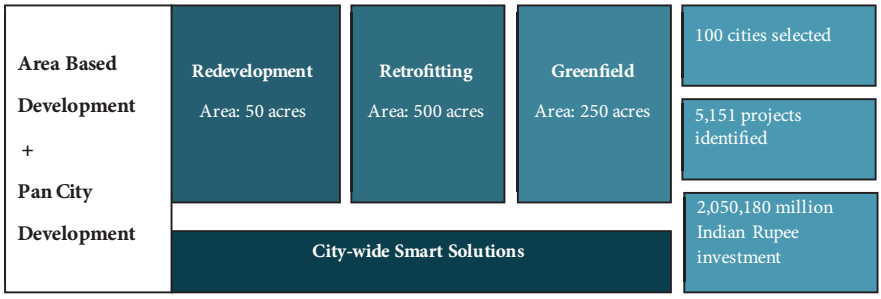
and time requirements. After careful evaluation, the government announced the proposed 100 cities under the mission and shared its vision for smart cities. These cities were announced in three phases. In Phase I 20 cities were selected, then in Phase II and III, 63 and 30 cities were shortlisted, then a comprehensive list of 100 cities was announced (India Smart Cities Mission, 2011).

5.3 Strategy Used in India

By enabling local area development and utilizing technology, particularly the technology that leads to smart outcomes, the Smart Cities Mission aims to drive economic growth and enhance people's quality of life (India Smart Cities Mission, 2011). By retrofitting and redeveloping existing areas, including slums with area-based development, the city as a whole will become more livable. In order to accommodate the growing number of people living in urban areas, new land, known as "greenfield" land, will be developed around cities. Cities will be able to use technology, data, and information to improve their services and infrastructure if smart solutions are implemented.

The strategic components of area-based development in the Smart Cities Mission include retrofitting, redevelopment, and greenfield development (Murthy Nimmagadda and Harish, 2022). It also includes a pan-city initiative in which various smart solutions are used in the bigger parts of the city (Figure 4). The overall development in this way will improve the quality of life, will help in creating jobs, and will raise incomes for everyone, especially the poor and disadvantaged (Ahluwalia, 2011).

Figure 4: Strategies of India's Smart Cities Mission



Source: adapted from India Smart Cities Mission (2011).

It was planned to introduce developments into an existing built-up area through retrofitting in order to achieve smart city goals, and other goals for making the existing area more efficient and livable. The city was asked to select an area of more than 500 acres for retrofitting after consulting with residents. The cities were required to prepare a smart strategy based on the residents' vision and the existing level of infrastructure services in the identified area. It was anticipated that the retrofitted smart city will contain a large number of smart applications and more intensive infrastructure service levels due to the fact that existing structures will largely remain intact in this model. Additionally, this strategy may be implemented faster, resulting in its replication in a different area of the city (Sen, 2014).

The built-up environment, that is currently there, was to be replaced as a result of redevelopment which will also make it possible to co-create a new layout with better infrastructure using mixed land use and increased density. Urban Local Bodies (ULBs), in conjunction with citizens, had identified an area of over 50 acres for redevelopment. For instance, a new layout plan with mixed land use, higher floor space index (FSI), and high-ground coverage was proposed to be created for the identified area. The Saifee Burhani Upliftment Project in Mumbai, also known as the Bhendi Bazaar Project and the National Building Construction Corporation's redevelopment of East Kidwai Nagar in New Delhi, are two examples of the redevelopment model (Buscher and Doody, 2010; Chourabi et al., 2012; Vanolo, 2014).

Using innovative planning, plan financing, and plan implementation tools (such as land pooling and land reconstitution), greenfield development proposed to introduce the majority of the smart solutions in a previously vacant area (more than 250 acres), with provisions for affordable housing, particularly for the poor. In order to meet the requirements of the expanding population, greenfield developments are required around cities. The GIFT City in Gujarat is a well-known illustration. Greenfield developments, in contrast to redevelopment and retrofitting, may be situated within the Urban Local Bodies (ULB) or the local Urban Development Authority (UDA)'s jurisdiction (Chun et al., 2011; Goodspeed, 2015; Hollands, 2015).

The implementation of selected smart solutions to the existing city-wide infrastructure was envisioned as part of a pan-city development. Technology, data, and information were proposed to be used to improve infrastructure and services as part of the application of smart solutions. For instance, citizens' productivity and quality of life were supposed to be improved as a result of implementing

smart solutions in the transportation sector (intelligent traffic management systems) and reducing average commute times and costs. Wastewater recycling and smart metering, for example, can significantly improve city water management using smart solutions. Each shortlisted city's smart city proposal was expected to include a pan-city feature with smart solution(s) and either a retrofitting and redevelopment, or greenfield development model, or a combination of the two. It was essential to note that a pan-city was offered as an additional feature. Due to the fact a smart city focuses on a small area, all city residents needed to believe there would also be something in it for them. In order to make the plan more inclusive, an additional requirement of at least one smart solution for the entire city had been added. The proposed development area for the Himalayan and northeastern states purposed to be half of what was required for any of the alternative models—greenfield development, retrofitting, or redevelopment (Basweshwar et al., 2020).

6. Evaluation

The evaluation of smart cities in India has to be done based on better sanitation in rural and urban areas, transportation within and outside cities, uninterrupted power supply, making housing available for all, digitization and IT connectivity in all parts of the country, a sustainable environment, and good governance (Shruti et al., 2021). More than 30 percent of India's population resides in approximately 500 cities. Given India's rapid urbanization and development, the number is likely to rise in the future (Reforms in Urban Planning Capacity in India, 2021). In light of this development, effective, safe, and efficient integration of ICT into cities is crucial to ensuring a better quality of life for both current and future residents (Yeh, 2017).

Furthermore, rather than just making cities more technologically advanced, the smart cities concept emphasizes their holistic development (Rozario et al., 2021). Furthermore, the evaluation should also address issues like a functioning sewage system, functioning infrastructure, housing, proper planning, and the availability of additional basic amenities (Doorsanchar et al., 2021). In other words, the most pressing requirements and opportunities will be thought of while evaluating smart cities development in India.

6.1 Major Challenges Being Faced

(a) Financing: Finance is the core to implement any projects. But the Indian smart cities project lacks smart privilege in terms of funding. As a result of 100 cities' smart city plans, a total investment of 1,911,550 million Indian Rupee have been approved (Aijaz, 2021). That is staggering. The project also appears to be off to a bad start due to the presence of state-sponsored businesses. The majority of the significant rise in the number of non-performing assets is attributable to the banks that are currently financing these projects. It is expected that the issue will soon be resolved, as the government has taken various measures in order to finance these projects (Kandpal, 2021).
(b) Coordination between the center and the states: A project can only be successfully put into action if various government agencies work together and also in coordinating various tasks. When it comes to planning for the development of smart cities, proper regulation is required. Only then can the Smart Cities Project be coordinated in both directions (India Smart Cities Mission, 2011).
(c) Existence of the master plan: The majority of Indian cities lacked master plans and development plans (Singh and Sharma, 2022). If we talk about turning them into smart cities, this is a tragic situation, because that is where the changes would be monitored and there is no other way to make it simple, better, and more effective. The presence of both requisites, i.e., implementation and encapsulation are the keys to the smart city project. Unfortunately, most Indian cities do not have them (Kadam et al., 2021).
(d) The plan does not include a time frame: The smart city plan, as a whole, was one big plan that needs to receive all approvals, if not immediately. Unfortunately, at some stage, nothing was available online and on time. In this context, the most significant action would have been to establish a single regulatory body to oversee all project approvals. The timely execution and coordination issues would have been addressed in this manner. In addition, it would have been entirely up to the body to meet the financial needs (OECD, 2021).
(e) Facilities are readily available: We are well aware of the regrettable fact that India currently lacks the necessary skilled labor and cutting-edge technology for the development of 100 smart cities (Aijaz, 2021). That is a significant number that necessitates considerable skills. When it comes to capacity building and the creation of skilled labor, neither the federal government nor the state has invested a significant amount of money in such an endeavor. Training, research, and a large database are needed to carry out these projects. This is a huge issue in our country because it is an area that hasn't yet been addressed.

These programs assist in numerous ways, including a time-bound completion.

(f) Corruption: Since this is the root cause of all the problems listed above, this point was likely intended from the beginning. However, if we only discuss it, this also presents a significant obstacle. Corruption exists at both the federal and state levels, and it is to blame for all the delays and mismatches in coordination. Due to this issue, financial constraint also appears in some way. Corruption is a problem in India that has always prevented or hampered the successful completion of the majority of major projects there.

6.2 Strategies that can be useful in the successful implementation of Smart Cities Mission in India

If the vision is to be realized, Indian citizens and government agencies alike will need to respond appropriately. The leadership at the center, the state, and the local level need to collaborate in order to devise strategies for dealing with the complex political environment that significantly impedes urban development at the moment.

- The smart city strategy should be improved by creating opportunities for the ongoing exchange of ideas and experiences. This knowledge should be used to improve the strategy.
- Public safety and security management recommendations should also be included in smart city plans; migrants who are poor and vulnerable and their means of subsistence; unemployment; lack of water, drainage, and sanitation; congestion in traffic and emissions from vehicles; degradation of the environment; encroachments and illegal structures; sloppy development in peri-urban areas; poor management of public celebrations of religion and culture.
- By including useful training programs, traditional urban local institutions should receive more people, money, and technical skills.
- The higher levels of government should help ensure that the lessons learned in trainings are put into practice well.
- Civic organizations ought to have sufficient authority to carry out projects and enforce laws.
- State and local governments should receive assistance in increasing their tax and non-tax revenues to meet the costs of implementing new development projects and day-to-day city management.
- Citizens should have access to efficiently managed services, both online and offline, for reporting issues such as power outages, water logging, and broken

roads. Moreover, these issues ought to be resolved promptly by the relevant agencies.

- The urban reform process ought to involve committed non-state actors working for the benefit of the city and its inhabitants, such as non-profit organizations (NGOs) and the private sector.
- Unemployed people should be made aware of the many career options available to them and be assisted in starting a variety of income-generating activities.
- New institutions should be established to increase the number of urban planners and managers in Indian cities, and more money should be given to improve the capacity of existing urban planning education institutions.

7. Conclusion

The overall need of urbanization has led to the need of developing smart cities in India. In June 2015, the current leadership of India launched the Smart Cities Mission with the intention of improving the quality of life for residents in 100 cities across all the country's states and union territories in a phased manner. Redevelopment, retrofitting and greenfield happens to be the three main strategies of the Indian Mission in order to develop smart cities in India. Reliable electricity and water supply, housing for all, sanitation and solid waste management, and IT and IT-enabled services happens to be the basic services a smart city tries to provide to its residents, but this study found that rather than just making cities more technologically advanced, the smart cities concept must emphasize their holistic development. The present study has also evaluated the Indian Smart Cities Mission and brought out the challenges faced in terms of financing, coordination between the center and the states, existence of the master plan, the plan not including a time frame, whether facilities are readily available, and lastly corruption. In order to achieve the proposed mission, the government needs to work effectively on these challenges. Lastly, certain strategies are also highlighted that can be useful in successful implementation of the Smart Cities Mission in India in the near future.

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