DEVELOPMENT OF SMART CITIES – A MEANS TO TRANSFORMING INDIA - A THEORETICAL STUDY

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Abstract

India is a country held high in regards world over for its rich cultural diversity and heritage. Transforming India has been the main motto of the present government at the centre. Prime minister Sri. Narendra Modi has started many initiatives in this direction. The paper is titled "Development of smart cities – a means to transforming India". This paper attempts to understand the issue and challenges in developing smart cities and in turn transforming the nation. The objectives of the study are to identify the efforts taken by the government in promoting smart cities, to understand the impact of smart cities on transformation of India and to suggest measures for transforming India. This study is a secondary data-based study by collecting information from websites, portals, journals etc. The researcher wants to analyse and evaluate the smart cities contribution in transformation of India.

Keywords: *Transformation, India, Smart cities, Issues and Challenges*

Introduction

India is a vast South Asian country with diverse terrain – from Himalayan peaks to Indian Ocean coastline – and history reaching back 5 millennia. In the north, Mughal Empire landmarks include Delhi's Red Fort complex and massive Jama Masjid mosque, plus Agra's iconic Taj Mahal mausoleum. Pilgrims bathe in the Ganges in Varanasi, and Rishikesh is a yoga centre and base for Himalayan trekking. India has a very rich culture and diversity and has a proud heritage.

Transformation according to dictionary meaning refers to a complete change in the appearance or character of something or someone, especially so that that thing or person is improved. Here its being referred to mother India which has a very rich legacy tradition and culture. Transforming India means taking India to a stronger and newer heights.

The mantra today is India is moving ahead at a rapid pace, Indians are marching together, like never before towards 3Ps ie Peace, Progress and prosperity. The various initiatives like Make in India, Skill India, Start up India, Demonetisation and march towards cash less economy, Digital India, reforms in taxation aspect in the form of one nation one tax-GST, identification and development of smart cities and many other initiatives have transformed India in the past 3 years a lot. Economic development across all sectors is among the foremost priorities of the government.

Smart Cities Mission is an urban renewal and retrofitting program by the Government of India with the mission to develop 100 cities across the country making them citizen friendly and sustainable.[1] The Union Ministry of Urban Development is responsible for implementing the mission in collaboration with the state governments of the respective cities.

Smart Cities Mission envisions developing an area within 100 cities in the country as model areas based on an area development plan, which is expected to have a rub-off effect on other parts of the city and nearby cities and towns. Cities were selected based on the Smart Cities challenge, where cities

needed to compete in a countrywide competition to obtain the benefits from this mission. As of January 2018, 99 cities have been selected to be upgraded as part of the Smart Cities Mission after they defeated other cities in the challenge

A smart city is an urban area that uses different types of electronic data collection sensors to supply information which is used to manage assets and resources efficiently. Smart city' is a city equipped with basic infrastructure to give a decent quality of life, a clean and sustainable environment through application of some smart solutions. Creating smart cities would entail development of basic infrastructure like adequate water supply, electricity supply, sustainable sanitation and solid waste management mechanism, efficient urban mobility, affordable housing and ensuring robust IT connectivity and e-governance.

Some typical features of comprehensive development in Smart Cities are described below.

- Promoting mixed land use in area-based developments–planning for 'unplanned areas' containing a range of compatible activities and land uses close to one another in order to make land use more efficient. The States will enable some flexibility in land use and building bye-laws to adapt to change;
- Housing and inclusiveness - expand housing opportunities for all;
- Creating walkable localities –reduce congestion, air pollution and resource depletion, boost local economy, promote interactions and ensure security. The road network is created or refurbished not only for vehicles and public transport, but also for pedestrians and cyclists, and necessary administrative services are offered within walking or cycling distance;
- Preserving and developing open spaces - parks, playgrounds, and recreational spaces in order to enhance the quality of life of citizens, reduce the urban heat effects in Areas and generally promote eco-balance;
- Promoting a variety of transport options - Transit Oriented Development (TOD), public transport and last mile para-transport connectivity;
- Making governance citizen-friendly and cost effective - increasingly rely on online services to bring about accountability and transparency, especially using mobiles to reduce cost of services and providing services without having to go to municipal offices. Forming e-groups to listen to people and obtain feedback and use online monitoring of programs and activities with the aid of cyber tour of worksites;
- Giving an identity to the city - based on its main economic activity, such as local cuisine, health, education, arts and craft, culture, sports goods, furniture, hosiery, textile, dairy, etc;
- Applying Smart Solutions to infrastructure and services in area-based development in order to make them better. For example, making Areas less vulnerable to disasters, using fewer resources, and providing cheaper services.

Cities under Smart City mission

99 cities have been included under the smart city mission. They were selected based on some competition under different phases. The various cities include Bhopal, Bhuvaneshwar, Pune, Jaipur, Surat, Ludhiana, Kochi, Ahmedabad, Jabalpur, Coimbatore, Udaipur, Chennai, Lucknow, Dharmasala, Panaji, Imphal, Mangalore, Vellore, Thane, Tirupathi, Agra, Kanpur, Tumkur etc,.

Review of Literature

Dilip Kumar Das (2017) found in their study that Indian cities seem to be in transition regardless of the various sustainability challenges they have experienced in recent years. Globalization, market economy, and technological developments have brought economic, social and infrastructural advantages. However, population growth, proliferation of urban functions, insurmountable increase in size of cities, and environmental crises because of climate change have caused the cities to experience severe spatial, infrastructural and environmental ailments. Besides, the significant rise of Information Communication Technology (ICT) industries in the cities and their socio-economic and spatial influence have brought about inequitable development.

Khusboo Gupta & Ralph P Hall (2017) Cities have been the engines of economic growth since the industrial revolution. While effective at catalysing prosperity, city development has not always been "smart" sacrificing human health, for instance, for greater productivity. Smart cities are now emerging. Leading smart cities such as Stockholm, Barcelona, New York, Vienna, and Toronto have incorporated efficiency into buildings, infrastructure, and social spaces using technological advancements, increasing the liveability, workability, and sustainability of these places. Inspired by these smart city developments, India is planning to build 100 smart cities in various parts of the country. This research presents insight into how smart cities are likely to evolve in India, by studying the priority areas considered in planning smart cities. It presents both the citizen and city official perspectives of smart cities. The results indicate that citizens value living, followed by mobility, environment, governance, and economy, whereas the city officials prioritize living, followed by environment, economy, mobility, and governance.

Arun Pratap Mishra et al (2017) published the paper which was an attempt to assess the current situation of Allahabad city by analysing various social, economic and urban components and its readiness for smart city transformation. Qualitative and quantitative data is collected from both primary and secondary sources. Multi-criteria decision analysis was used as a method to produce consolidated score against each parameter. Consolidated score enables to understand current status of social, economic, and urban sector in Allahabad city and their contribution toward making smart city. Allahabad has a lot of potential to transform into smart city, but road ahead will not be easy. They pointed that in many areas complete overhauling is required. To make smart city transformation possible, city officials, academicians, and citizens should cooperate with each other wholeheartedly.

Need for the study

The researcher felt a need for the study to analyse the impact of smart city on the transformation of India. There has been lots of issues and challenges in the development of smart cities. Hence there is a need for the analysis on this topic.

Objectives of the study

The objectives of the study are

- To identify the efforts taken by the government in promoting smart cities.
- To understand the impact of smart cities on transformation of India.
- To suggest measures for transforming India

Research Methodology

The study is a descriptive study and the researcher has made an attempt to understand the issues and challenges in transforming India through development of Smart cities. The data is collected from secondary source from websites, journals, newspaper articles, etc.

Scope of the study: the study is restricted towards finding out the impact of development of smart cities to transforming India keeping other factors and forces of transformation constant.

Discussion

As per the definition, a smart city is defined as a city which uses information and communications technology to ensure that both its critical infrastructure and public services and components it offers are more interactive and efficient and that citizens can become more aware of them. Smart city projects are big investments that are supposed to drive social transformation.

How Smart Cities contribute to Transformation?

Smart cities can contribute to development and transformation of India in the following ways:

- The biggest contribution is that it leads to Creation of Employment opportunity for many people in and around the city.
- They drive social transformation among public as they are technology driven and not people driven.
- The concept of smart city creates efficiency among government agencies, at the environmental level and residential level by eliminating the redundancies.
- It helps in provision of high quality products and services at low cost and enhances the resident's quality of life.
- This in turn leads to increase in GDP and GNP of the country as more demand leads to more production of goods and services.
- Increase in GDP contribute to Development of city
- It also leads to Balanced regional development in the country.
- It ultimately leads to overall Economic growth and development of the country and ultimately leads to transforming the country.

All the above benefits directly and indirectly contributes to the transformation of the country.

Challenges

The challenges in development of smart cities are as under:

- The biggest challenge is the acquisition of land for creating smart cities. The land acquisition law might prove to be a deterrent and make the acquisition costlier, thereby making the residential and commercial units costlier. While the government is considering amendments in the Land Acquisition Bill, these changes may take time.
- Moreover, the process of project approvals needs to be simplified. History suggests that most project delays are on account of delay in project approvals. There is need for a single window approval process system.
- The other area of concern is the kind of employment these smart cities will generate. While the smart city will act as a centre of economic growth, it should also provide the right mix of livelihood to those migrating to it. Else, the migration of people will continue to pose a threat to the overall socio-economic scenario of the city.

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- The economic growth of the city depends on the mix of industries and sectors it will cater to. Thus, there is a need to conduct such feasibility studies to understand the likely developmental and economic strength of the new city. The dream of 100 new smart cities is achievable but it is imperative that we start looking at shaping our existing cities too.
- There is lots of expenditure on the part of the ex-chequer and strains on the countries reserves. Also, it is not an easy task for the government to develop a city in all aspects.

Findings, Suggestions and Conclusions

It has been found that smart cities offer lots of advantages and contribute positively towards the transformation of the country. It has been a great start by the government which has led to the development of the region, state and in the long run will contribute to overall growth, development and transformation. It can be suggested that the concept is of nascent origin as far as India is concerned and requires some time for knowing the actual impact on transformation of the economy. The suggestion for transforming can include options like making the cities more techno friendly and giving more emphasis on being environment friendly and using innovative ideas for waste disposal etc.

The limitations of the study are as under:
- The researcher has taken only one aspect of transformation
- Since it is based on secondary data, it suffers from all the limitations of the secondary data.
- The reliability is limited to the reliability of the data
- The findings cannot be generalised to the entire population.

Scope for future research

There is a scope for future research in collecting primary and first-hand data from the people concerned and making the study more elaborate.

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