

Smart City

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ABSTRACT

As India's population continues to grow, more citizens will move to cities. Experts predict that about 25-30 people will migrate every minute to major Indian cities from rural areas in search of better livelihood and better lifestyles. It is estimated that by the year 2050, the number of people living in Indian cities will touch 843 million. To accommodate this massive urbanization, India needs to find smarter ways to manage complexities, reduce expenses, increase efficiency and improve the quality of life.

KEYWORDS: Smart city- Smart Governance Smart Energy Smart environment Smart Transportation Smart Education Smart Health Smart Building Smart IT and Communication

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I. INTRODUCTION

India has a population of 1.27 billion plus, and growing. To accommodate rapid urbanization, the Government of India has allocated Rs. 6,000 crore for the smart cities project and to develop infrastructure in another 500 cities. Most other funding will come from Indian and overseas private sector companies. The exhibition and conference will connect Indian and foreign exhibitors, with various ministries, state governments, municipal bodies, industry leaders, decision makers, and stakeholders, who are developing smart cities.

The platform will attract government officials, investors, industry leaders and experts from around the globe to discuss and exchange ideas, information, project reports, etc., on the opportunities and future requirements for developing smart cities in India

Smart city includes the following:

- Smart Governance
- Smart Energy (Grid)
- Smart Environment
- Smart Transportation
- Smart IT and Communications
- Smart Health
- Smart Education
- Smart Buildings

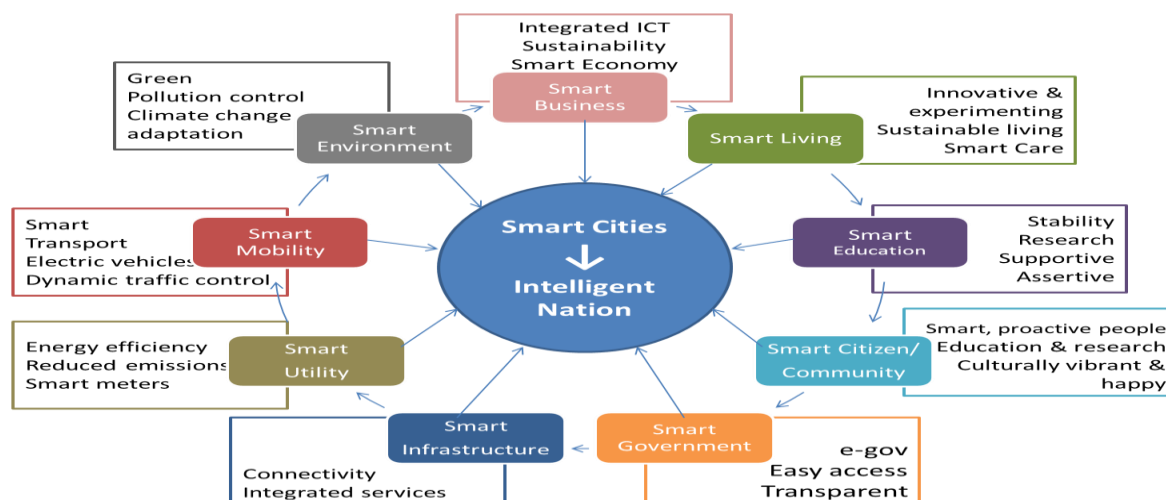
II. LITERATURE SURVEY

It has been suggested that a smart city (also community, Business cluster, urban agglomeration or region) use information technologies to:

1) Make more efficient use of physical infrastructure (roads, built environment and other physical assets) to support a strong and healthy economic, social, cultural development.

2) Engage effectively with local people in local governance and decision by use of open innovation processes and e-participation with emphasis placed on citizen participation and co-design.

3) Learn, adapt and innovate and thereby respond more effectively and promptly to changing circumstances. They evolve towards a strong integration of all dimensions of human intelligence, collective intelligence, and also artificial intelligence within the city. The intelligence of cities "resides in the increasingly effective combination of digital telecommunication networks (the nerves), ubiquitously embedded intelligence (the brains), sensors and tags (the sensory organs), and software (the knowledge and cognitive competence).



RESEARCH ELABORATION: FOR SMART GOVERNANCE:

Option 1:

Use Twitter Samvad

Here is a list of a 16 government partners who have participated in the launch of Twitter Samvad:

Accounts	Description	Phone Number
@NarendraModi	Personal account of Indian Prime Minister, Shri Narendra Modi	011 3006 3006
@PMOIndia	Official account of the Prime Minister of India, Shri Narendra Modi	011 3006 3007
@adgpi	Official account of Additional Directorate General of Public Information, IHQ of Ministry of Defence	011 3049 6116
@RailMinIndia	Official account of the Ministry of Railways	011 3049 6222
@anandibenpatel	Personal account of Anandiben Patel, Chief Minister of Gujarat	011 3049 6050
@CMofKarnataka	Official account for the Chief Minister of Karnataka, Siddaramaiah	011 3049 4737
@CPBLR	Official account for Mr. M N Reddi, IPS, Commissioner of Police, Bengaluru City	011 3049 5141
@BlrCityPolice	Official account for Bengaluru City Police	011 3049 5242
@blrcitytraffic	Official account for Bengaluru City Traffic Police	011 3049 5464
@ncbn	Personal account of N Chandrababu Naidu, Chief Minister, Andhra Pradesh,	011 3049 5767
@TelanganaCMO	Official account of Chief Minister of Telangana, Kalvakuntla Chandrashekar Rao	011 3049 5868
@YadavAkhilesh	Personal account of Akhilesh Yadav, Chief Minister of Uttar Pradesh	011 3008 3380
@UPGovt	Official account for the Government of Uttar Pradesh	011 3049 6353
@NitishKumarJDU	Personal account of Nitish Kumar, Chief Minister of Bihar	011 3008 2828
@MamataOfficial	Personal account of Mamata Banerjee, Chief Minister, West Bengal	011 3008 3333
@MeaIndia	Official account of Ministry of External Affairs, India, Syed Akbaruddin	011 3049 5969

How Twitter Samvad will work for users:

- Users will have to give a missed call to each of the numbers listed above to follow each of their Twitter accounts. For example, for Prime Minister Narendra Modi, the number is 011 3006 3006.
- Immediately after placing the missed call, users will start to receive a curated set of Tweets throughout the day keeping them in touch with leaders and government agencies.
- In case of emergency or urgent public announcements, account owners (leaders, government agencies, disaster management cell) can instantly send an update on a given situation to all registered users.

Option 2:

The Govt Records need to be regularised and Law and Order machinery overhauled.

Option 3:

Geievence cell technique can be used for poor people.

FOR SMART GRID

Option 1:

1. SMART GRID KEEPS YOUR LIGHTS ON.

- It overhauls aging equipment.
- It equips the grid to meet increasing demand.
- It decreases brownouts, blackouts, and surges.

2. SMART GRID LOWERS ENERGY COSTS.

- **It gives you control over your power bill.**
- It facilitates real-time troubleshooting
- It reduces expenses to energy producers

3. SMART GRID SECURES AMERICA'S ENERGY INDEPENDENCE

- It facilitates broad-scale electric vehicle charging
- It makes renewable power feasible.
- It maintains our global competitiveness

Option 2:

Radio frequency and smart meters

Option 3:

Data privacy and smart meters

FOR SMART ENVIRONMENT

Option 1:

To clean up the air, the following actions need to be done.

- Measuring the CO₂ emissions of all vehicles.
- For removing this CO₂, required number of trees to be planted.
- If we plant more trees then the environment will have Oxygen plus. For this Pollution control board and RTO department need to make necessary laws and enforce the same to clean up the air by removing the CO₂ emission of all vehicles .

Option 2:

Improving Power sector and Cleaniness of public places

Option 3:

Improvement in sanitation, Solid waste and chicken wastes

FOR SMART TRANSPORTATION

Option 1:

Intelligent transportation system

- Wireless communications
- Computational technologies
- Floating car data/floating cellular data
- Sensing technologies
- Bluetooth detection
- Video vehicle detection
- Inductive loop detection

Option 2: NMT(Non Motorized Transport) and Bicycling should be emphasize while developing the Smart Cities.

Option 3: Use of SPV (Special Purpose Vehicle) by NDA govt.

FOR SMART IT AND COMMUNICATIONS

Option 1:

- Big data
- Processing and Analysis of data
- Fast and easy network to network connectivity.
- security of data (PKI).
- presentation of data for citizen / departments / devices / robots.

FOR SMART HEALTH

Smart Health Checkup Includes:

- **Lipid Profile :** To detect Cholesterol & Heart health
- **Liver Profile :** To detect Liver Functions levels
- **Renal Profile :** To detect Kidney Functions levels
- **Bone Profile :** To detect Calcium & Phosphorus levels
- **Thyroid Profile :** To detect all over Metabolic Health and Thyroid levels
- **Diabetes Monitoring:** Blood sugar fasting & Urine Microalbumin
- **Urine Profile:** To detect urine biochemical levels & urine infection
- **Iron Profile:** To detect Iron deficiency Anaemia
- **Complete Blood Count:** To detect Anaemia, Blood Counts & Cancer
- **Electrolyte Profile:** Sodium, Potassium, Chloride

Option 1: Online facilities of complete checkups

III. FOR SMART BUILDINGS:

- Connecting building systems
- Connecting people and technology
- Connecting to the bottom line
- Connecting to the global environment
- Connecting to the smart power grid
- Connecting to an intelligent future

IV . RESULT AND DISCUSSION

- Improvement in Infrastructure
- Better Tourism:
- Renewable energy
- Digital India
- Money to states
- Direct benefits transfers
- Social Security
- Innovation
- Livability

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