SMART LIFE IN SMART CITIES

Prof. Pravin D. Kharat Assistant Professor, MIT ACSC, Alandi, Pune

Abstract:

The idea of a smart city has caught the imagination of the urban sector in India. There is excitement about the application of new technologies and the deployment of development models that can deliver social and economic outcomes that can ensure the sustainability of urban interventions. The smart cities mission of the Government of India applies the concept of 'area improvement' of existing Indian cities, bringing the best practices related to the new urbanism movement into the purview of development activities that can stimulate the local economy, harness the economic identity of a place and its people and improve the quality of life for all citizens. It is necessary that the government establish clarity about how the city comprises various systems, networks and environments that lend themselves to transformation for achieving the objectives of the Smart City mission. The study is to find the different indicators for the development of smart life in Smart Cities.

Key Words: Smart Life, Smart Cities, Smart Resource Management etc.

Introduction: The keyword analysis of Smart Cities' main goals and drivers is divided based on literature in three main domains (academic, governmental, industry). It shows that academic literature has a holistic approach and covers a wide range of issues. It is mostly concentrated on improvement in three main aspects: governance, community/social development, and Environment. From the industrial point of view, Smart Cities emerge mainly due to the interaction between competition and sustainable urban development. In addition, efficiency and sustainable environment are amongst Smart Cities' main objectives. Finally, governmental literature is more concerned with overall challenges including quality of life, economic growth, environment, energy, sustainability, health and safety, and mobility. The top five in the combined list included economic growth; sustainable environment; sustainability; quality of life; and improved governance.

A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects.

Statement of the Problem: The concept smart city pops up frequently in the context of urban development. The concept definitely has a positive flavor, but what does it actually mean? All around the world, urbanization is a growing trend. Now days India focus on the development of urban cities into Smart cities. As more and more people get together, smart systems and their integration need to be developed, not only to provide the services that people need but also to do so efficiently with minimum impact on the environment. The researcher tries to cover the indicators of Smart cities which build Smart life.

Objectives:

- 1. To study the concept of Smart cities.
- 2. To study the indicators of smart cities which builds Smart Life?

Working Definition:

- Smart City: A developed urban area that creates sustainable economic development and high quality of life by excelling in multiple key areas; economy, mobility, environment, people, living, and government. Excelling in these key areas can be done so through strong human capital, social capital, and/or ICT infrastructure.
- **SMART:** SMART is a management term used to set goals. The term has been frequently used in management, HR and marketing. Due to globalization the city itself to be Smart. The Full Form of SMART is: S – Specific M – Measurable A – Attainable R – Relevant T - Time-bound.
- Smart Life: The Smart Life is an approach conceptualized from a frame of prevention, focused on quality life, and aimed toward fostering independent and productive life styles

Research Methodology: This study is essentially a survey of literature about smart cities. It is not a compendium of solutions or an illustration of the smart cities mission of the Government of India. As the title suggests, it is essentially a navigation tool that might be useful for those who wish to understand the context in which smart cities in India are being envisaged. The area-based approach of the Ministry of Urban Development, which is directed towards revitalizing existing cities through a systematic improvement of entire living environments & quality life improvement in smart cities.

Literature Review:

- A smart sustainable city is an innovative city that uses information and communication technologies (ICTs)and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects.
- Emphasizing the cities governance aspect, Ghani (2012) says the concept of says the • concept of "Smart Cities" is "really about good governance. It's about giving basic services to our citizens. It's about livability. It's about how we are using our resources. It is how a city functions on a day-to-day basis. I think smartness is about doing more with less."
- The importance of reforms is stated by Correa (2014) "The promise of the new government • to build 100 Smart Cities will require not only new technology but also drastic reforms in the political and institutional environment in which our cities function, with a focus on connectivity, integrated land use and transport planning, and environmental sustainability."

Analysis & Interpretation: Traditional city differs from smart city in different ways such as in traditional city there is High Power theft resulting in power shortages and intermittent blackouts while in smart city there is low theft, higher collections for the provider, adequate power supply,

no blackouts and lower carbon emissions. In traditional city there are water shortages, timed water supply, and revenue losses for the provider while in smart city there is continuous and 24 hours water supply and higher collections for the provider. In traditional city there is high congestion, slow moving traffic, and high pollution while in smart city there is better traffic flow, low pollution. Traditional city need more apps or facilities to access citizen services while smart city will be well connected and will have smart portals to keep a track of utility services and other city level services.

The definitions put forward in the earlier section draw attention to governance and in some cases participatory governance as a tool to manage the growth of the Smart Cities, thereby enhancing the quality of life and optimum management of natural resources. Quite a few Smart City theories and models, including models which are an amalgamation of simple frameworks and hybrid in design and new ideas, are emerging. This section sheds light on the grouping of these models based on their theoretical framework using various research methodologies.

A Smart City framework is based on priority areas which are specific to the city's context. Any model can focus on one or more of these priority areas depending upon the agenda of the programme under which it is proposed or initiated. Broadly, the priority areas can be categorized into Political, Economic, Technology, and Environment based on an abridged version of PESTLE analysis which is widely used as a tool to understand the new project business landscape by industries, specifically marketing industries. Although there are other focus areas, the categories mentioned are most common and comprehensive.

Smart City Model: Boyd Cohen Smart Cities Wheel: This model has the base six dimensions similar to Giffinger et al. (2007) but the number and type of factors for each dimension were different and limited to three. The objective of developing this tool by (Cohen 2011) was to support the development of holistic Smart City strategies, to develop baselines, and to transparently track the progress. Smart Cities are not 'one size fits all'. Cohen admits that his "model has been inspired by the work of many others." The fact that many others are working to make cities smarter should be encouraging, especially in the light of the fact that urbanization is occurring at an historical rate. Cohen indicates that "there are over 100 indicators to help cities track their performance with specific actions developed for specific needs" behind the model. He says that efforts to create a smart city should begin with three steps. They are:

Step: I: Create a vision with citizen engagement;

Step: II: Develop baselines, sets targets, and choose indicators; and

Step: III: Go lean.



Indicators of Smart life:



Smart Parking: Parking is the foundation of a true Smart city. As a user when you enter a smart city, you would be able to identify exact parking spots available for Parking. The amount to be paid for the time spent & probably space occupied will be known. For the smart government, this would increase the revenue of 20 to 30%.



Smart Transport: Intelligent transport system is the brain of a city. In a Smart city you would be guided the exact Speed at which you should drive the vehicle, the system will be provide camera images to users to decide which route to opt for. Bus or Metro connectivity information

ISSN (Print): 2394-207X IMPACT FACTOR: <mark>4.205</mark> ILTILINGUAL STUDIES

INTERNATIONAL JOURNAL OF MULTIFACETED AND MULTILINGUAL STUDIES

will be available on real time basis. If unexpected traffic flow is expected in one direction, additional roads opening will be available to manage the traffic. BUs stands will provide Wi-Fi access, Air Purifiers and comfortable waiting lounge. In case a Bus brakes down mission control will ensure alternative arrangements for passengers.



Clean Energy: Smart urban lighthing is for street lighting which will automatically recharge its batteries. All lighting will be interconnected to each other & providing information to Mission control operations center in case a light is offline. The lantern posts shall provide traditional lighting as well as with censors will provide information on available parking, provide electric recharge points for electric cars. The light will automatically deemed when a few cars are passing by. Overall the city will save on power Consumption.



Citizen Safety: Public safety using camerasand predictive analysis software to predict behaviour and analyse situational behaviour multiple agencies such as Police, Fire, Emergency, Courts, Neighbourhood groups etc, can be notified, it is like Pro active Policing.



Water Management: Recently a company in UP deployed 1000 Sensor points from four major rivers basins, such initiatives will be history. Water is an essential resource and in a smart city, any wasteage will be tagged immediately along with the low capacity of water availability. So seeing water overflow or asking for a tanker will be a thing of the past.



Smart Maintenance: Just like when u start a Smart Car instantly the system checks every major component, if something is wrong you would see a light blinking. Similarly everyday Smart city will run checks to ensure everything is running smoothly. If there is an issue, they will be able to identify and fix it immediately.

Tele-Care: Senior citizens or kids or patients would be given an alert device that will monitor them. This service will be optional for citizens and if they wish their health to be monitored by their smart hospital. This will reduce insurance fees . The doctor will call Pro actively to inform the patient of things to do to improve fitness & Health or send an ambulance in case of Heart attack without the need of calling the ambulance.

Conclusion: A smart city has integration of various concepts, like urban planning, energy conservation, mobility and human management. Use of information technology and communication is very important here. This, combined with sustainable urban development leading to greater efficiency in health care, uninterrupted supply of clean water and power, smart buildings, waste disposal and recycling, smooth and convenient mobility system are the cornerstones.Smart City's goal is to improve the quality of life and safety of all citizens, while making our world sustainable. Smart cities make smart citizens and a smart life

The quality of life is much better as a smart city offers better safety and security, inclusiveness, entertainment, ease of seeking and obtaining public services, cost efficient health care, quality education, and opportunities for participation in governance.

Last but not the least, we have to educate our own community as to how to live in a smart city. The utilization index depends on the character of the inhabitants and their ability to use the facility in correct manner.

References:

- 1. Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
- 2. Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- 3. Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), Six theories of child development: Revised formulations and current issues. Greenwich, CT: JAI. Bennett, W. J. (1993). The index of leading cultural indicators (Vol. 1, pp. 1-23). Washington, DC: The Heritage Foundation. Boyer, D., & Fine, D. (1992). Sexual abuse as a factor in adolescent pregnancy and child maltreatment. Family Planning Perspectives, 24, 4-11.
- 4. Boykin, A. W., & Toms, F. (1985). Black child socialization: A conceptual framework. In H. McAdoo & J. McAdoo (Eds.), Black children (pp. 33-51). Beverly Hill, CA: Sage. Braverman, P. K., & Strasburger, M. D.(1993)Adolescent sexual activity: Part 1. Clinical Pediatrics, 11, 658-667.
- 5. Brown, P. J., Ballard, B., & Gregg, J. (1994). Cultural, ethnicity, and the practice of medicine. In A. Stoudemire (Ed.), Human behavior: An introduction for medical students (2nd ed., pp. 84-104). Philadelphia, PA: J. B. Lipaincott.
- 6. Comer, J. (1992). Raising Black children. New York: Plumer
- 7. Erikson, E. H. (1950). Childhood and society. New York: W. W. Norton.

- 8. Erikson, E. H. (1962). *Young man Luther*. New York; W. W. Norton. Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: W. W. Norton.
- 9. Gary, F. (1991). Sociocultural diversity and psychiatric mental health nursing. In F. Gary & C. K. Kavanagh, *Psychiatric mental health nursing* (pp. 136–162). Philadelphia, PA: J. B. Lippincott.
- Gilliard, D. K., & Beck, A. J. (1994). *Prisoners in 1993*. (Bulletin, NCJ Publication No. 147036, June, 1994). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Hammett, M., Powell, K. E. O'Carroll, P. W., & Clanton, S. T. Centers for Disease Control. Homicide surveillance-United States, 1979–1988. In CDC Surveillance summaries, May 29, 1992.*MMWR* 1992;41(No. SS-3), pp. 1–6 Atlanta: Epidemiological Program of the Centers for Disease Control, Public Health Service, U.S. Department of Health And Human Services.
- Kochanek, K. D., & Hudson, B. L. Centers for Disease Control. Advance report of final mortality statistics, 1992. In CDCMonthly Vital Statistics Report, December 8, 1994;43(6), pp. 1–6, Supplement. Atlanta: National Center for Health Statistics of the Centers for Disease Control, Public Health Service, U. S. Department of Health And Human Services
- 13. Lawton, J. T. (1982). Introduction to child development. Dubuque, IA: W.C. Brown. Google Scholar
- Moone, J. (1994). Juvenile victimization: 1987–1992. (Fact Sheet Publication No. 17, June 1994) Washington, DC: U. S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. Google Scholar
- 15. Mosher, W. D., & McNally, J. W. (1991). Contraceptive use at first premarital intercourse: United States, 1965–1988. *Family Planning Perspectives*, 23, 108–116. Google Scholar
- 16. Muuss, R. (1980). Adolescent behavior and society. (3d. Ed.). New York: Random House. Google Scholar
- 17. Ogbu, J. (1983). Socialization: A cultural ecological approach. In K. Borman (Ed.),*The social life of children in a changing society* (pp. 253–267).
- 18. Peters, M., Massey, G. (1983). Chronic vs. mundane stress in family stress theories: The case of black families in white America.*Marriage and Family Review*, 6, 193–218.Google Scholar
- 19. Santrock, J. W. (1990). Adolescence (4th ed.). W. C. Brown.
- 20. Semaj, L. (1985). Afrikanity, cognition and extended self-identity. In Spencer, G. Brookins, & Allen (Eds.), *Beginnings* (pp. 173–183). Hillside, NJ: Erlbaum.Google Scholar
- 21. Spitz, A. M., Ventura, S. J., Koonin, L. M., Strauss, L. T., Frye, A., Heuser, R. L. Smith, J. C., Morris, L., Smith, S., Wingo, P., & Marks, J. S. Centers for Disease Control. Surveillance for pregnancy and birth rates among teenagers by state United States, 1980 and 1990. In CDC Surveillance summaries, December 17, 1993.MMWR 1993;42(No. SS-6), pp. 1–27. Atlanta: Epidemiological Program of the Centers for Disease Control, Public Health Service, U.S. Department of Health And Human Services.Google Scholar
- 22. State of Florida, Department of Health and Rehabilitation Services, Office of Vital Statistics (1994). *Florida vital statistics 1993*. Jacksonville, FL: Author.Google Scholar
- 23. Thornton, M. C., Chatters, L. M., Taylor, R. J., & Allen, W. R. (1990). Sociodemographic and environmental correlates of racial socialization by black parents. *Child Development*, 61, 401–409. Google Scholar
- 24. U.S. Substance Abuse and Mental Health Services Administration (1992).*National household survey on drug abuse (1991)*. Bethesda, MD: Author.Google Scholar