

# Survey Paper on Internet Thing of Smart Cities

Jeetendra Patel  
B.E. Student

Department of IT-Kirodimal Institute of Technology, Raigarh (C.G.)  
[Email-jeetendrapatel747@gmail.com](mailto:Email-jeetendrapatel747@gmail.com)

Rakesh patel  
Assistant Professor

HOD, IT Department, CSVTU University, Chhattisgarh  
Department of IT-Kirodimal Institute of Technology, Raigarh (C.G.)  
[Email-rakeshpatel.kit@gmail.com](mailto:Email-rakeshpatel.kit@gmail.com)

Prateek Kumar Singh  
Lecturer

Department of IT-Kirodimal Institute of Technology, Raigarh (C.G.)  
[Email-prateek.kitraigah@gmail.com](mailto:Email-prateek.kitraigah@gmail.com)

## ABSTRACT

*As this world we can assume that ,what could be the meaning of “smart” so ,it’s have lots of meaning like ,knowledgeable, a smarty, which can be perfect in all field. In general term we can define smart city as smartness of city. Internet content of infinity of things many of them are useful and many of they were of no use generally i.e. internet are designed to support smart city, by solving the problem of communication system of every technologies used by citizens and by city’s requirement .This paper present the internet things of make smart cities, we know smart cities I things “smart” means intelligent cities, sustainable cities, digital cities and so on. The concept of “smart cities” is response to this challenge. This paper explores smart cities as environment of open and user-driven innovation for experimenting and validating Future internet enabled services and future internet experimentally-driven research and projects in the domain of living labs that the smart cities project developed in urban area a performed in collaboration with the cities municipality.*

## Keywords:

Internet, www, LAN, MAN, WAN, Smart City.

## II. INTRODUCTION

Today we are living in the age of Information technology and Computer Have become one of the integral parts of everyone’s life. It is interconnectivity of the computer systems which has made it possible to share any type of information among the networked computers irrespective of the distance and platform. Internet is one of the global network of numerous Computers and computer network which connect billions of computers to exchange information with each other. It provides many useful

facilities like e-mailing, chatting, video conferencing etc. which allow the user to quickly and effectively communicate with other. Online shopping commercial transaction and World Wide Web (WWW) are some other useful facilities of this largest network of the world without which we can’t think of our life today. People strong inclination to concentrate in cities generated both positive and negative effects at global level. On one hand it causes the increasing of cultural level, the creation of new job opportunities and an improvement of economic conditions. On the other hand, concentration in cities increased traffic jam, carbon dioxide, greenhouse gases emissions and waste disposal with consequences on health conditions.

## Smart city green concepts

City dimension drives energy and natural resources demand, the need of territory redevelopment and adequate infrastructures availability. In this scenario, to save the earth and people health, the idea of smart cities emerges, that is, cities able to solve urban issues paying attention to the environment. For this reason, in the nineties, the concept of smart growth has begun to spread: it implies a community-driven reaction to solve traffic congestion, school overcrowding, air pollution, loss of open space and skyrocketing public facilities cost. Now-a-days many have their own traffic problem. Because of traffic the people surrounding to that, they will be affected by noise pollution. So, we can use sound absorbing metal to protect from that. Being a smart city Traffic light should be connected to a main building controller and it will control the whole traffic lights of the smart city. Instead of this we can use bridge or

underground roads. For night traffic, traffic light should also to work.

### Smart city or digital city technologies

in a make smart and digital city many technologies have to play roles. Technologies and gadgets are important factor for the smart city. A better communication system will help the digital or smart city i.e. we can call it as a perfect city to interchange their views thus, CITY WILL CONNECT SMARTLY.

Internet uses a set of two protocol TCP/IP (Transmission Control Protocols/ internet protocol) to exchange the information between the source and destination system In this complex scenario, the application of the I.T paradigm to an urban context is of particular interest, as it responds to the strong push of many national governments to adopt ICT solutions in the management of public affairs, thus realizing the so called Smart City concept. Although there is not yet a formal a widely accepted definition of “Smart City,” the final aim is to make a better use of the public resources, increasing the quality of the services offered to the citizens, while reducing the operational costs of the public administrations. This objective can be pursued by the deployment of an urban I.T, i.e., a communication infrastructure that provides unified, straightforward, and economical access to a plethora of public services, thus unleashing potential synergies and increasing transparency to the citizen. Inurbanity ,as a matter of fact, may bring a number of bane it’s in the management and optimization of traditional public utilities, such as transport and parking, lighting, surveillance and maintenance of public regions, preservation of cultural history, garbage collection, celebrity of hospitals, and school. Furthermore, the availability of different types of data, collected by a pervasive urban I.T, may also be exploited to increase the transparency and promote the actions of the local government toward the denizen, enhance the awareness of people about the status of their city, stimulate the active participation of the citizens in the management of public administration, and also stimulate the establishment of new services upon those provided by the I.T. Therefore, the application of the I.T. prototype to the Smart City is particularly attractive to local and regional administrations that may become the early adopters of such technologies, thus acting as catalyzes for the adoption of the I.T. paradigm on a broader scale. The objective of this paper is to discuss a general reference

Framework for the smart city things and to their meaning of smart city is different type Table

Concept	Definition	Reference
Wired city	“Wired cities refer literally to the laying down of Cable and connectivity not itself necessary	smart Holland’s
Virtual city	“Virtual City concentrates on digital representations and manifestations of cities”	Schuler
Ubiquitous city	“Ubiquitous city (U-City) is a further extension of digital city concept. This definition evolved to  The ubiquitous city: a city or region with ubiquitous information technology”	Anthopoulos et al
Intelligent city	“Intelligent cities are territories with high capability for learning and innovation, which is built-in the  Creativity of their population, their institutions of knowledge creation, and their digital infrastructure for communication and knowledge management”	Koninis
Information city	“Digital environments collecting official and unofficial information from local communities and delivering it to the public via web portals are called information cities”	Anthopoulos et al.
Digital city	“The digital city is as a comprehensive, web  Based representation, or reproduction, of several aspects or functions of a specific	Couclelis

	real city, open to non-experts. The digital city has several dimensions: social, cultural, political, ideological, and also theoretical”	
Smart community	<p>“A geographical area ranging in size from Neighborhood to a multi-county region whose residents, organizations, and governing institutions are using information technology to transform their region in significant ways. Co-operation among government, industry, educators, and the</p> <p>Citizenry, instead of individual groups acting in isolation, is preferred”</p>	California Institute

I think smart city is a make and growth fulcrum is very important role play that is a main point that help we make a smart city.

In the early 1990s the phrase "smart city" was coined to signify how urban development was turning towards technology, innovation and globalization. The World Foundation for Smart Communities advocated the use of information technology to 434 H. Schaffer's et al. meet the challenges of cities within a global knowledge economy. However, the more recent interest in smart cities can be attributed to the strong concern for sustainability, and to the rise of new Internet technologies, such as mobile devices (e.g. smart Phones), the semantic web, cloud computing, and the Internet of Things (IT) promoting real world user interfaces. The concept of smart cities seen from the perspective of technologies and components has some specific properties within the wider cyber, digital, smart, intelligent cities literatures. It focuses on the latest advancements in mobile and pervasive computing, wireless networks, and middleware and agent technologies as they become embedded into the physical spaces of cities. The emphasis on smart embedded devices represents a distinctive characteristic of smart cities compared to intelligent cities, which create Territorial innovation systems combining knowledge-intensive activities, institutions for cooperation and learning, and we Based applications of city.

### Smart traffic in smart cities-

A smart traffic management system can easily be prepared

for Make smart city. We can make smart traffic with help of internet and that is important of smart city that is a picture of smart city. Traffic system is a necessary factor for any city. First of all the citizen of the city have to be smart for smart city. They have to follow rules and regulation i.e. stopping at red signals, parking zone and so on. And instead, it is caused by traffic incidents. As a result, detecting incidents early and responding to them effectively makes for safer roads, less congestion, and smoother traffic flow.



The Cisco smart connected city traffic solution combines if cameras, sensors applications, and the Cisco smart connected city Wi-Fi infrastructure to provide visibility of live traffic conditions for traffic management authorities in real time.



We can have a better traffic by controlling the crowd of city. The road should be four lane. And inside of a city no such a huge vehicles be allowed there should be a different road for crossing the city.

Now a day some smart city have problem which are negligible. Wasting the precious money in traffic police we can use that money in internet things like online navigation, checking the speed limit and so on. There should be cameras at all point checking for the crime. An automated traffic light system, All building should make in that way they can bear up the earthquake at possible level. There shouldn't be so many curved roads and many small road shortcut, all these have high impact on traffic and crowd.

### III. CONCLUSION

In this paper, we analyzed the solutions currently available for the implementation of urban I.Ts. The discussed technologies Are close to being standardized, and industry players are already Active in the production of devices that take advantage of these Technologies to enable the applications of interest,. In fact, while the range of design options for I.T. systems is rather wide, the set of open and standardized Protocols is significantly smaller. The enabling technologies, Furthermore, have reached a level of maturity that allows for the Practical realization of I.T. solutions and services, starting from field trials that will hopefully help clear the uncertainty that still prevents a massive adoption of the I.T paradigm.

### REFERENCES

- [1] Ravi k. chough, bhawana puri, Joel gill Deglitch information technology
- [2] P. Bella vista, G. Cardone, A. Corradi, and L. Foschini, "Convergence of MANET and WSN in It urban scenarios,
- [3] A. Lays, V. I. Bratu, and J. Markendahl, "Who is investing in machine-to- Machine communications?
- [4] H. Schaffer's, N. Koninis, M. Pallot, B. Trousse, M. Nilsson, and A. Oliveira, "Smart cities and the future internet: Towards cooperation.
- [5] A. S. Elmaghraby and M. M. Losavio, "Cyber security challenges in Smart Cities: Safety, security and privacy," *J. Adv. Res.*, vol. 5, no. 4, pp. 491–497, Jul. 2014.
- [6] S. Raza, L. Wallgren, and T. Voigt, "SVELTE: Real-Time Intrusion Detection in the Internet of Things", *Ad Hoc Networks*, Elsevier, pp 2661–2674, May 2013.
- [7] S. Sicari, A. Rizzardi, L.A Grieco and A. Coen-Porisini, "Security, privacy and trust in Internet of Things: The road ahead", *Comput. Netw.* 76, 146–164, 2015,
- [8] A. Alcaide, E. Palomar, J. Montero-Castillo and A. Ribagorda, "Anonymous authentication for privacy-preserving iot targetdriven applications", *Comput. Secur.* 37, 111–123, 2013.
- [9] C. Hu, J. Zhan and, Q. Wen "An identity-based personal location system with protected privacy" in *IoT*, in: *Proceedings - 2011 4th IEEE International Conference on Broadband Network and Multimedia Technology, IC-BNMT 2011, Shenzhen, China, 2011*, pp. 192–195.
- [10] S. Papadopoulos, Y. Yang and D. Papadias, "Cads: continuous authentication on data streams", in: *Proceedings of the 33rd International Conference on Very Large Data Bases, VLDB '07, Vienna, Austria, 2007*, pp. 135–146.
- [11] B. Carminati, E. Ferrari and K.L. Tan, "Specifying access control policies on data streams", in: *Proceedings of the Database System for Advanced Applications Conference, DASFAA 2007, Bangkok, Thailand, 2007*, pp. 410–421.
- [12] D. Evans and D. Evers, "Efficient data tagging for managing privacy in the internet of things", in: *Proceedings – 2012 IEEE Int. Conf. on Green Computing and Communications, GreenCom 2012, Conf. on Internet of Things, iThings 2012 and Conf. on Cyber, Physical and Social Computing, CPSCom 2012, Besancon, France, 2012*, pp. 244–248.
- [13] X. Huang, R. Fu, B. Chen, T. Zhang and A. Roscoe, "User interactive internet of things privacy preserved access control", in: *7th International Conference for Internet Technology and Secured Transactions, ICITST 2012, London, United Kingdom, 2012*, pp.597–602.
- [14] J. Cao, B. Carminati, E. Ferrari and K.L. Tan, "CASTLE: continuously anonymizing data streams", *IEEE Trans. Dependable Secure Comput.* 8 (3) (2011) 337–352.
- [15] Y. Wang and Q. Wen, "A privacy enhanced dns scheme for the internet of things", in: *IET International Conference on Communication Technology and Application, ICCTA 2011, Beijing, China, 2011*, pp.699–702
- [16] R. Neisse, G. Steri and G. Baldini, "Enforcement of security policy rules for the internet of things", in: *Proc. of IEEE WiMob, Larnaca, Cyprus, pp. 120–127, 2014.*
- [17] J. Mao and L. Wang, "Rapid identification authentication protocol for mobile nodes in internet of things with privacy protection", *J. Networks* 7 (7), 1099–1105, 2012.
- [18] M. Palattella, N. Accettura, X. Vilajosana, T. Watteyne, L. Grieco, G. Boggia and M. Dohler, "Standardized protocol stack for the internet of (important) things", *IEEE Commun. Surv. Tutorials* 15 (3), pp. 1389–1406, 2013.
- [19] I. Bagci, S. Raza, T. Chung , U. Roedig and T. Voigt, "Combined secure storage and communication for the internet of things", in: *2013 IEEE International Conference on Sensing, Communications and Networking, SECON 2013, New Orleans, LA, United States, pp. 523–631, 2013.*

[20] D. Boswarthick, O. Elloumi and O. Hersent, “M2M Communications: A Systems Approach”, first ed., Wiley Publishing, 2012.

**Jeetendra Patel** B.E Student

Department of IT-Kirodimal Institute of Technology,  
Raigarh (C.G.)

[Email-jeetendrapatel747@gmail.com](mailto:Email-jeetendrapatel747@gmail.com)

**Rakesh Patel** Working as an HOD & Assistant Professor,  
Department of IT-Kirodimal Institute of Technology,  
Raigarh (C.G.)

[Email-rakeshpatel.kit@gmail.com](mailto:Email-rakeshpatel.kit@gmail.com)

**Prateek Kumar Singh** Working as an Lecturer  
Department of IT-Kirodimal Institute of Technology,  
Raigarh (C.G.)

[Email-prateek.kitraigarh@gmail.com](mailto:Email-prateek.kitraigarh@gmail.com)