Role Of Digital India Program In Strengthening Good Governance: A Study Of Jammu Municipal Corporation

Ms. Shivali Choudhary Ph.D.Scholar, Dept. of Public Policy and Public Administration, Central University of Jammu, Email id: choudharyshivali91@gmail.com

Ms. Anu Bagul Ph.D. Scholar, Dept. of Public Policy and Public Administration, Central University of Jammu, Email id: anubagul66@gmail.com

Mr. Siddharth Mahajan Ph.D. Scholar, Dept. of Public Policy and Public Administration, Central University of Jammu, Email id: sid07m@gmail.com

Abstract

Digital India Programme is the application of ICT in the processes of government functioning to bring about –SMART Government. Digital India Programme has brought a new revolution in the field of governance. It brought rapid development of digital infrastructure, improved universal access through Information and Communication Technology, and digital empowerment of citizens. It has encouraged wider participation of citizens in public affairs, improved the process of governance, encouraged quick decision-making, and improved delivery of services to citizens i.e. the hallmark of good governance. It has brought transparency in government operations, downsizing the government workforce, re-engineering of the service systems, performance management, and emphasis on delivery of reliable and quick public services.

Over the last few years, there has been a sudden rise in the online services provided by the municipalities. This allows citizens to access multiple citizen services through a single window, and through a single account instead of having multiple visits to individual websites of local authorities. Thus, digitalization helps in making the availability of municipal services in a more responsive and transparent way.

Lots of changes have been witnessed in the way the Jammu Municipal Corporation was running in the last decades of the passing century. These changes forced the governments towards new techniques and technologies for good governance agenda. The ICT and Digital India Programme implemented by JMC has improved efficiency, enhanced quality of services, improved overall trust between citizens and JMC, increased accessibility of JMC services, increased transparency in the functioning of Municipal Corporation, reduced the time limit for providing services, enhanced capacities and performances of JMC, increased citizen participation and reduces corrupt practices.

In the present paper, the focus should be laid on identifying the various online services provided by Jammu Municipal Corporation, their benefits, certain challenges which the JMC is facing in the delivery of services.

Introduction

Digitalis another name given to the application of Information and Communication Technology (ICT). Digital is not only limited to the Internet and Computers but also to mobile phones, artificial intelligence, social networking, blockchain, mobile apps, and much more. In the course of time, there has been a tremendous shift in the way ICT has been used. Its focus has been shifted from simple productivity improvement and automation to making life easier, simpler, and connected. Information and Communication technology has transformed our lives and works across various sectors, industries, and institutions. Digitalization has pervaded all aspects of life. Life is unimaginable without the use of the internet and smartphones. Now we are just one click away from anything. This process of Digitalisation got a big boom during the Covid-19 period because at that time everything was shut down and we were only digitally connected with the world be it health, shopping, banking, transport, education, work-life etc.

Digital India Programme

The government of India is also promoting digitalization. It had launched the "Digital India Programme" on 1st July 2015. It is a flagship programme of the Government of India. Its vision is to transform India into a digitally empowered society and knowledge economy. The main vision of this Digital India Programme was to ensure that Government services should be available to citizens electronically by improving digital infrastructure, increasing internet connectivity, and by digitally empowering the country in the field of technology (Government of India).

Digital India Programme is the application of ICT in the processes of government functioning to bring about –Simple, Moral, Accountable, Responsive, and Transparent (SMART) Government. Digital India Programme has brought a new revolution in the field of governance. It brought a rapid development of digital infrastructure, improved universal access through Information and Communication Technology, and digital empowerment of citizens. It has encouraged wider participation of citizens in public affairs, improved the process of governance, encouraged quick decision-making, and improved delivery of services to citizens which are hallmarks of good governance. It has brought transparency in government operations, downsizing the government workforce, re-engineering of the service systems, performance management, and emphasis on delivery of reliable and quick public services.

Pillars of Digital India Programme:

Digital India Programme plays a pivotal role in the development of the country. It focuses on the development of nine different thrust areas for inclusive development which leads to strengthening the society. The nine pillars of the program are:



- **1. Broadband Highways:** Under this, the networks were integrated with cloud infrastructure in order to offer cloud services and high-speed broadband connectivity services. This includes the development of three components of broadband highways namely National Information Infrastructure, Urban Broadband, and Rural Broadband.
- **2. Mobile Connectivity:** This includes increasing the penetration of mobile phone networks and establishing a network hub and providing connectivity to all uncovered rural areas.
- **3. Public Internet Access:** It encompasses the establishment of at least one common service centre (CSC) in each Gram Panchayat and the establishment of a Post Office will act as a multi-service centre.
- **4. e-Governance:** It comprises the development and modification of the governance process in terms of its structure and working procedure with the development of ICT.
- **5. e-Kranti:** It is a national e-governance plan with a vision to ensure government services are accessible electronically to citizens through multiple modes. It's a transformation in the delivery process of services.
- **6. Information for All:** With the development of an open data platform, Information for all types is available to everyone through internet penetration.
- **7. Electronic Manufacturing:** It stresses the promotion of e-manufacturing in the country.
- **8. IT for Jobs:** Under this, individuals were trained in IT sectors from towns and villages so that they can earn their livelihood and strengthen society.

9. Early Harvest Programme: It aims to bring digitalization into traditional platforms of the Government of India.

Relationship between Good Governance and Digital Governance

Good Governance is fundamental in nature whereas Digital Governance is instrumental. Digital Governance is a tool used for enhancing and strengthening the economy and empowering the citizens. No e-Governance initiatives and tools can be effective until some reforms in the functional procedure of government are carried out for its fruitful results. Good Governance dictates the layouts of the plans and shapes digital governance. Digital Governance can be an effective and efficient tool for good governance if and only if some process reforms have been carried out. Simply, making the government processes digitalized can also create some technical and complex problems rather than being solving the other institutional problems. With the advent of Business Process Reengineering (BPR) and for effective implementation of e-Governance plan, the information system should regulate and be capable itself enough to reach to the common man and help the government to avail services to both citizens and other stakeholders with the changing needs and demands of the society.

Good Governance refers to an ideal situation where the government used to manage its affairs and resources in such a manner that meets the needs of the society.

According to the UN E-Government Development Index (EGDI) 2020, "Denmark holds the first ranked with a near-perfect e-Government Index with a rating of 0.9756 whereas India was on the 100th ranked with an EGDI score of 0.5964. The EGDI assessment is based on three components: Online Service Index, Telecommunication Infrastructure Index, and Human Capital Index."

The advances in Information and Communication Technology brought by Digital India Programme have transformed the relationship between government and citizens and business in new ways and are leading towards good governance. This Digital India Programme is providing the opportunity to people by involving them in the process of governance at all levels. Better services have been provided to citizens in terms of quality and timelines, thus it helps in making governance more efficient and effective. Thus, leading it towards good governance.

Implementation of Digital India Initiatives in Jammu Municipal Corporation (JMC)

Jammu Municipal Corporation has adopted the E-Governance model in 2012 and also launched a new dynamic website and mobile app in Jan 2016 for the speedy delivery of services to the citizens in a more transparent, accountable, and efficient manner like Birth Certificates, Building Permissions, and Public Grievances, etc. The implementation of egovernance has elevated the quality of life of both employees and citizens. This step of JMC is a move towards good governance.

Before the start of this project, manual work was done in JMC which took a lot of time, often delays in providing services, and allegations of corruption in many cases. But after the implementation of Digital India initiatives in the municipal bodies the delivery of services has been improved in less time.

Digital or Online Services provided by JMC

These are explained as under

- **1. Online Public Grievance Redressal System (PGRS)**: In this system, citizens can lodge their complaints and grievances with the Municipalities. The citizens in return will be provided a unique grievance ID through which they can track the status of their complaint. Municipalities have to redress the complaint within a specific time period.
- **2. Online Birth and Death Registration Application:** JMC has designed an app for the online registration of births and deaths. The citizens who register by this get a unique registration number automatically generated by the software. With this unique registration, citizens can track the status of their certificates.
- **3. Online Building Permission system:** With this app citizens can online apply for building permission and NOC from the JMC. The JMC after checking the building map and after verifying the location can online generate the NOC certificates.
- **4. Online RTI Application:** In this system, citizens can file online RTI and can demand required information from the concerned section within a limited time period. The citizens can file RTI after paying the required fees by online mode. After filing RTI citizens can regularly track the status of their RTI.
- **5. Online User Charges:** With this app, citizens can online pay the charges of the sanitation and waste dumping services provided by JMC.
- **6. Online Pay Rent of Municipal Shop/Flat:** By using this service, citizens can online pay rents of Municipal shops and flats.
- **7. Online NOC System:** Citizens by using this system can online demand no objection certificate from the Municipalities before starting any construction. The Municipality after verification generates the NOC certificate.
- **8. E-Tendering:** JMC has designed an app for e-tendering with which citizens can file online applications for e-tendering.
- **9. Apply for Rehri License:** Citizens can apply for an online Rehri License from the JMC by this service.
- **10.Online Booking of Septic/Water Tank:** By using this service citizens can online book septic and water tanks if required.

How it is beneficial for Citizens:

- 1. It provides online Single-Window access to various services of JMC.
- 2. It provides better service delivery and quick information.
- 3. It provides Quick service delivery at a decentralized level.

- 4. It increases the productivity of the Jammu Municipal Corporation.
- 5. It improved communications.
- 6. It simplifies the procedures.
- 7. It streamlined the process of approval.
- 8. It increases the participation of people in decision-making.
- 9. It improved interaction with municipal government at different levels.
- 10. It helped in tracking the performance of all sections of JMC.
- 11. It helps in Quick redressal of public grievance.
- 12. It increases transparency and accountability in JMC functioning.

Literature Review

For the present study various literatures has been referred. Following are some of the reviewed literature.

Meijer, Lips & Chen (2019) examined the prospective of open governance in an information age. They conceptualized the theoretical perspective of open governance and the nature of the state that has evolved through various stages and leads to open governance. They tried to explore the core elements and socio-technical development with regards to open governance paradigm and highlighted its dynamics by comparing and contrasting open governance with existing governance paradigms such as public administration, New Public Management, and New Public Governance. It was concluded that the new open governance through its innovative form can solve the complex problem of policy issues which can contribute to existing knowledge.

Salam (2017) considered e-Governance as an effective tool of service delivery in developing countries. He pointed out three main contributions of e-Governance in terms of improving e-administration, e-services, and building e-society. He also attempts to identify the interlink between the factors responsible for effective implementation of e-governance initiatives and ensures good governance like accountability, transparency, responsiveness. Rule of law and participation indicators. It is concluded that the DESC (District E-Service Centres) delivers services to citizens efficiently. It has a positive impact on the citizen's expectations but still, there is a need for improvement in e-governance initiative in order to full fill the good governance promises.

Soni (2016) emphasized on the role of e-governance in transforming India. Among developing countries, India was the earlier adopter of e-governance. With the advent of ICT, users are getting easy access to government services and information. It was considered that the development of any country depends upon the services rendered by the government and their efficient implementation. She identified various challenges which lead to e-governance projects inefficient. She also discussed the need for e-governance in India in order to cope with developed countries. It is concluded that

although the majority of e-government projects have been failed to yield the potential benefits despite that India has a number of award-winning e-government projects. Thus, there was a need for awareness among people to utilize the services provided to them for the successful deployment of e-governance projects.

United Nations (2016) stated that "the 2030 Agenda is centered on a set of far-reaching and people-centered universal Sustainable Development Goals (SDGs). Reaching these goals in all countries and creating peaceful, just, and inclusive societies would be extremely difficult in the absence of effective, liable, and inclusive institutions. Against this backdrop, the 2016 United Nations E-Government Survey highlighted a positive global trend towards higher levels of e-government development. Countries in all regions were increasingly accepting innovation and utilizing ICTs to deliver services and engage people in decision-making processes. It addressed the growing demand for more custom-made services that reflect individual needs, as well as people's aspiration to be more closely engaged in the design and delivery of services. These new demands were transforming the way the public sector operates. At the same time, the disparity remains within and among countries. Lack of access to technology, poverty, and inequality prevent people from fully taking advantage of the potential of ICTs and e-government for sustainable development."

Sood (2016) focused on "the use of information and communication technology for delivering government services to the citizens in an effective manner. In their study, they stressed the empirical examination of the adoption, development, and status of electronic government in Punjab and Nagaland. According to them, the government ministries have adopted online communications as one of the main resources for the delivery of services. A content analysis was conducted on both the government websites to provide data on the current level of information and type of services functionalities available. The objective here was to develop an understanding of the status of e-government by using content analysis data gathered from the content and attributes of government ministry websites as empirical evidence. Through this analysis, the study assessed the possible contribution e-government can make in increasing access to information, improving the delivery of government services and enhancing government-citizen relations."

Tata Designed Services (2015) stressed "how municipalities across countries can embrace new technologies to address operational challenges and leapfrog existing governance paradigms through a system-wide transformation. According to this paper, the effective use of social media, mobility, analytics, and cloud technologies can help fast track the move toward participatory or interactive democracy. As municipalities move towards the participatory governance model, the challenge would lie in how well municipalities can balance the need for improved service delivery while containing operational costs. By shifting from traditional to digital channels, leveraging the right combination of emerging technologies, municipalities can deliver cost-efficient and citizen-centric services."

Mohanasoundari (2015) in their paper stated that today IT has emerged and developed into a key dominant segment in the Indian economy. The fundamental motivation for the implementation of e-governance in India is to provide an efficient government, a government that is simple, accountable, responsive, and transparent. A demand-driven 'citizen interface' e-governance implemented in India would improve the success of ICT ventures, especially in rural areas. Although e-governance is of main concern for all state governments, some have taken a front and developed successful models from which others can take a lead. The study assesses the significant project implemented by the Tamil Nadu state government at the Panchayati level. Shortage of staff as well as a group of representatives of the staff for other purposes makes the problem more severe and results in the incompetence of modern administration tools for birth/death and marriage registration that was entered under the Akshaya initiatives could not be verified so for due to the above reasons. A review of the impact of e-Governance on public service delivery, digital divide, cost of service, corruption, etc. has revealed that the potential of e-Governance projects to contribute to development has been unquestionably accepted across countries.

PEARL (Peer Experience and Reflective Learning) Initiative (2015) ensured that Under the JNNURM, 'e-governance' was one of the mandatory reforms to be achieved at the ULB level. In an effort to fill the critical gaps for efficient service delivery in Indian cities, a number of good practices from across the globe have been compiled to address specific issues in the areas of water supply, sanitation, solid waste management, urban mobility, and the incorporation of information and communication technology in service delivery process. This compilation assembles good practices from different countries. Cases from different countries are examined from the perspective of increasing operational efficiency, enhancing systematic capacity, creating efficient public-private partnerships, and building long-term sustainability into urban management activities.

Shah (2007) tried to reflect the importance and issues related to e-governance in India. She described the basic structure of e-governance of Layne's four-stage growth model based on technical, organizational, and managerial feasibilities. The objective of the paper is to find out India's position in the e-governance growth model. She highlighted some critical issues which hinder the successful implementation of e-governance. It is concluded that e-governance can be considered both a big challenge and a far big opportunity for efficient implementation of services to all citizens in an effective way. There is also a need for social acceptability and awareness among citizens about e-governance and its initiatives.

Research Gap

From the review of literature, it was found that different countries in the world are utilizing Digital Technology for the online delivery of public services. Municipalities in different regions of the world are also delivering e-services. So many municipalities in India had been digitized. With the adoption of digital technology, the services provided

by municipalities had become more transparent, accountable, efficient, effective, participatory, democratic, and responsive. It has reduced corruption and time-bound movement of files. It has strengthened the process of good governance in Municipalities. But the literature review also highlighted various issues which are faced by citizens and municipal employees while delivering online services.

Statement of the Problem

Jammu Municipal Corporation had adopted Digital India Initiatives and started delivering various online services like Public Grievance Redressal, Delivery of Birth and Death Certificates, Building Permission, RTI Application, User Charges, online paying ofrent for Municipal Shop/Flat, Online NOC/License System, E-Tendering, Apply for Rehri License,Online Booking of Septic/Water Tank. In the literature reviewed it was found thatlots of changes have been witnessed in the way the Jammu Municipal Corporation was running in the last decades of the passing century. These changes forced the governments towards the adoption of new techniques and technologies for good governance agenda. The ICT and Digital India Programme implemented by JMC has improved efficiency, enhanced quality of services, improved overall trust between citizens and JMC, increased accessibility of JMC services, increased transparency in the functioning of Municipal Corporation, reduced the time limit for providing services, enhanced capacities and performances of JMC, increased citizen participation and reduces corrupt practices.

The literature reviewed also highlighted various challenges and problems which the JMC is facing in the delivery of services. The present paper focused on identifying the role of Digital India Initiatives in strengthening the process of good governance. The present paper also helped in studying the gaps, barriers, and resistance to e-government systems from various stakeholders, including citizens and public employees.

Research Questions

- 1. To what extent Digital India Program has strengthened good governance in Jammu Municipal Corporation.
- 2. What are the challenges and problems faced by Jammu Municipal Corporation in the online delivery of services?
- 3. Do the citizens satisfy with the online services provided by Jammu Municipal Corporation?

Objectives

- 1. To study the role of the Digital India Program in strengthening good governance in Jammu Municipal Corporation.
- 2. To find out the challenges and problems faced by Jammu Municipal Corporation in the online delivery of services.
- 3. To find out whether the citizens are satisfied with the online services provided by Jammu Municipal Corporation.

Research Methodology

Jammu Municipal Corporation has been selected for research study in order to evaluate and understand the role of Digital India Initiatives in strengthening good governance. Depending on the research objectives the study uses a quantitative research design to gain in-depth analysis into the phenomena being studied. The study uses exploratory and descriptive research design for the collection of data through the survey method with the help of an interview schedule. The sample has been taken through a simple random sampling technique.



The area of study was Jammu city. The Jammu city comprises 96 wards out of which 70 wards came under Municipal Corporation. Out of 70 wards, 7 wards are selected on the basis of population. From each of the 7 wards, 10 respondents were selected. The secondary sources of data collection methods are various official reports, discussion papers, articles, journals, and newspapers. The study covers various online services provided by Jammu Municipal Corporation.

Major Findings of the Study

In this study, the researcher had analyzed the role of the Digital India program in strengthening the good governance of Jammu Municipal Corporation. The major findings of the study are discussed below:

1. **Online Services:** After the analyses and interpretation of it was found that after the implementation of the Digital India program, JMC is providing various online or digital services through the website to the citizens. It is a successful transformation from the traditional (manual) delivery of services. These online services areOnline Birth Certificate, Online Building Permission, Online RTI Application, Online Pay Rent of Municipal Shop/Flat, Online User Charges, Online Booking of Septic/Water Tank, E-

- Tendering, Online NOC/License System, Apply for Rehri License, Online Public Grievance System.
- 2. **Improved Transparency and Accountability**: With the implementation of the Digital India Programme it was found by the researcher that the transparency and accountabilityin the services provided by Jammu Municipal Corporation have improved as the information related to the online services which are delivered by JMC are open and accessible to all by means of internet. It was found that this online delivery of JMC services had removed discretion from JMC employees and provides citizens as watchdogs in order to monitor potential corruption at different levels of JMC.
- 3. **Improvement in Effectiveness:** ICT and Digital India Programme have improved the effectiveness of JMC as the file movement has been reduced and maximum emphasis is given on time-bound online delivery of services.
- 4. **Time-bound and efficient delivery of services:** With the implementation of ICT-based digital services, JMC officials are bound to deliver services within a specific time period. It is the liability of JMC employees to deliver services in time. Now the citizens can track the status of their application through the website by using a unique application ID. Thus, the delivery of services has become time-bound. In this way efficiency of services provided by JMC had increased.
- 5. **Improvement in Cost-Effectiveness:** The majority of the respondents thinks that e-Governance improves the cost-effectiveness as it saves traveling cost and makes information and services available to citizens at any time by themselves
- 6. **Transformed the relation between government and citizens:**It was found that the ICT and Digital India Programme has transformed the relationship between government and citizens because there is no need to make repeated visits to the JMC office as the citizens can avail these services by sitting at home by just one click. Thus, it savesthe time of the citizensand also provides delivery of services on a 24/7 basis which was otherwise delivered only during working hours.
- 7. **Empowered Citizens:** The majority of the respondents agreed that e-Governance has empowered the citizens by facilitating various services which enable the citizens to make use of them so that they can perform their functions efficiently.
- 8. **Satisfaction of Citizens:** It was found that the majority of literate citizens are satisfied with the online delivery of the services. Because they need not visit in JMC office for getting their work done. Most of the JMC services can be availed by citizens by sitting in their homes.
- 9. **A step towards good governance:** It has been found by the researcher that the switching over of JMC from manual delivery of services to digital mode of delivery of

- services is a step towards good governance as it has increased transparency, efficiency, and accountability. It has increased citizens' participation.
- 10. **Issues regarding Network Connectivity and Infrastructure:** It was found that Network Connectivity and Infrastructure for the implementation of Digital services are not satisfactory. There is a need to develop better network-related digital or electronic infrastructure for online access to facilities, for fast and easy delivery of services. Also, there is a need to install more mobile towers in order to increase internet connectivity.
- 11. **Trained manpower required for handling digital services:** It has been found by the researcher that the trained manpower required for providing, handling, and implementing e-services is not satisfactory as there wasnot sufficient manpower in various sections of JMC to deal with the e-delivery of services.
- 12. **Lack of Awareness among Citizens:** The majority of the respondents said that no awareness was provided to citizens regarding the use of online services. And many of them were unaware of the online services provided by the JMC.
- 13. **Lack of Digital Literacy:** Many citizens in the municipal area don't have technical knowledge. Many senior citizens don't know how to use smartphones and laptops so they cannot apply for online services.
- 14. **Language Barrier:** Some illiterate and less educated citizens consider language as a barrier in using online services. Because the website of JMC is in the English language.
- 15. **Cyber Crime:** Many citizensin the Municipal area do not prefer online transactions because of the fear of cybercrime and moreover they don't consider them secure.

Conclusion:

While summing up it can be said that the Digital India programme has created a new paradigm, under which innovative ways of delivery of services has conceived which focused not only on service delivery but on customer satisfaction as well. The implementation of Digital India Initiatives in Jammu Municipal Corporation has improved efficiency, enhanced quality of services, improved overall trust between citizens and JMC, increased accessibility of JMC services, increased transparency in the functioning of Municipal Corporation, reduced the time limit for providing services, enhanced capacities and performances of JMC, increased citizen participation and reduces corrupt practices. It is a move from governance towards good governance.

Although the implementation of Digital India Initiatives in JMC has improved the functioning of JMC still there are some challenges faced by Jammu Municipal Corporation in the proper implementation of digital services like Network Connectivity, Digital Infrastructure, language barrier, cyber-crime, lack of awareness, lack of digital literacy and shortage of technical employees in JMC.

But in spite of the pros and cons of the implementation of Digital India Initiatives in JMC, it helped a lot in the empowerment of citizens. It helped in breaking the web of bureaucracy, reduced red-tapism, and corruption. It provided better delivery of services and in making the employees of JMC accountable to citizens.

Suggestions

In order to make the effective implementation of the Digital India Programme in JMC following points should be taken care of:

- 1. Digital literacy should be promoted among the staff of the JMC and the citizens in the Municipal area.
- 2. Cyber infrastructure also need to be installed to safeguard data security & from cyberattacks.
- 3. Online access points or kiosks should be created in public places. So that everyone can avail these online or digital services at a subsidized rate. These kiosks can also help illiterate citizens in accessing these digital services.
- 4. In order to make improvements in existing services regular feedback from citizens is required.
- 5. JMC should collaborate and engage with other partners such as the public sector, private sector, and civil society if they want to deliver improved services to citizens.
- 6. More and more wifi hotspots need to be installed at various public places in the cities to allow easy access to citizens to various services provided by JMC through digital mode

References

- Aijaz, R. (2007). Challenges for Urban Local Governments in India. Asia Research Centre, Working Paper.
- Asgarkhani, M. (2005). The Effectiveness of e-Service in Local Government: A Case Study. The Electronic Journal of e-Government, pp. 157-166.
- Bannister, F., & Connolly, R. (2012). Defining e-Governance. Indiana University Press, e-Service Journal, 8(2), 3-25.
- Department of Economic and Social Affiar. (2016). United Nations E-Government Survey 2016.
 - https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2016-Survey/E-Government%20Survey%202016.pdf
- Karpagavalli, V. & Mohanasoundri, R. (2015). Effectiveness of e-governance services at panchayat level in Tamilnadu. International Journal of Marketing and Technology, 5(3), 81-90.

- Meijer, A. J., Lips, K., & Chen, K. (2019). Open Governance: A New Paradigm for Understanding Urban Governance in an Information Age. Frontier in Sustainable Cities, 1(3).
- Ministry of Electronics & Information Technology. (2016). Towards a New India: Transforming the Digital Dream to Reality. https://www.digitalindia.gov.in/ebook/DigitalIndiaCoffeeTableBook-TowardsNewIndia.pdf
- Ministry of Electronics and Information Technology. (2016). Digital India Power to Empower. https://www.indemb-oman.gov.in/docs/15977288114.%20DIGITAL%20INDIA%20-%20English.pdf
- National Institute of Urban Affairs. (2015). Report on ICT in Urban Services. Peer Experience and Reflective Learning (PEARL), New Delhi. https://citynet-ap.org/wp-content/uploads/old/2015/05/GP-GL1-ICT.pdf
- Salam, M. A. (2017). E-Governance for Good Governance: Experiences from Public Service Delivery. Communication on Applied Electronics (CAE), 7(3), 26-29.
- Shah, M. (2007). E-Governance in India: Dream or Reality? International Journal of Education and Development using Information and Communication Technology (IJEDICT), 3(2), 125-137.
- Shahnavazi, M., & Shahnavazi, Y. (2012). E-Municipality; New step in providing electronic services in Iran. International Journal of Business and Social Science. 141-154.
- Soni, P. (2016). E-Governance in India: An Overview. International Journal of Research, 3(8), 125-137.
- Sood, V. & Kaur, M. (2016). E-governance an effective tool of Modernization: A comparative study of the states of Punjab and Nagaland in India. Imperial Journal of Interdisciplinary Research (IJIR), 2(8) 1088-1098.
- Tata Designed Services. (2016). Digital Municipalities Moving toward Participatory Democracy. http://www.tcs.com/industries/government/Pages/default.aspx