CHAPTER – I

1.1 INTRODUCTION

In the recent past, every government has been trying to achieving good governance for strengthening democracy, promoting transparency and improving accountability in administration. It has been observed that the bureaucratic structure of public administration has failed to respond with the changing demands of the present times and deliver quality services to citizens. In order to achieve the goals of good governance and providing better services to the citizen’s governments have focused to adopt the Information and Communication technology in their working. The concept of empowering the governments and citizens via electronic governance i.e. e-governance has gained momentum\(^1\). It is pertinent here to understand the term governance before we move on to e-government and e-governance. Governance is a broad and complex mechanism, encompassing every institution and organization in the society from the family to the state. To World Bank, “Governance is the traditions and institutions by which authority in a country is exercised for the common good. This includes (i) the process by which those in authority are selected, monitored and replaced, (ii) the capacity of the government to effectively manage its resources and implement sound policies, and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them\(^2\). In short, governance is a way of describing the links between governance and its broader environment-political, social and administrative.

The term E-government is the use of ICT to promote more efficient and effective government and facilitate more accessible government services. It allows greater public access of information and makes government more accountable to citizens, constitutes a subject of e-governance and it might involve delivery services to citizens by using ICT. In other words e-government leads to e-governance, which is a broad concept and includes the use of ICT by government and civil societies to promote greater participation of citizens in the governance of political institutions.

\(^2\)www.worldbank.com
E-governance means use of Information and Communication Technology (ICT) in government agencies, public sector and beyond, for the purpose of enhancing governance, improved interactions with business and industry. The aim is to redefine governance in the ICT age to provide, simple, moral, accountable, responsive and transparent (SMART) governance. The resulting benefits can be less corruption, greater convenience, revenue growth and cost reduction. E-governance has tremendous potential to shift the nature and structure of government. Thus, e-governance is being considered as powerful instrument, which deals with the problems confronting the governance system in the developing countries.

At the administrative level, E-governance offers an opportunity to governments to adopt certain new value propositions of the Internet age thereby bringing about paradigmatic shift in government. E-governance has introduced new vocabulary into the discipline of Public administration. Not only that it has also provided new theoretical models and established linkages between various disciplines. E-governance strengthens accountability, increase transparency, improve efficiency, and check corruption. To put it simply, it means taking the government to the doorstep of the people. At the service level, E-governance provides transparent, responsive and speedy services to the citizens. It has been providing opportunities to the citizens to communicate with government; effectively participate in the policy-making and faster communication between citizens. E-governance is transforming organizations by introducing ICT in their governance system and breaking down organizational boundaries and facilitating democratic processes.

1.2 SCOPE OF E-GOVERNANCE

E-governance encompasses a wide range of activities; the scope can be classified under a variety of models developing upon the nature of interaction and agencies in interaction.

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**Government to Citizens (G2C)**

The government to citizen’s relationship (G2C) provision by the local authorities is largely in the first stage of cataloging information. G2C are those activities in which the government provides one-stop services such as file income taxes, pay taxes, renew driving licenses, payment of telephone, water and electricity bills and healthcare and Public Distribution System (PDS), and online access to information to citizens. In G2C relation government enable citizens to ask questions about government’s agencies and receive answers. In addition government may disseminate information on the web, provide downloadable form online and list goes on\(^5\).

**Citizens to Government (C2G)**

In C2G model, citizens interact with government with the help of ICT, they provide feedback to the government regarding polices and programs implemented by the state and center government and suggest the government through electronic devices. The citizens can lodge complaints and redress their grievances. In addition citizens take part in decision-making process of government.

**Government to Government (G2G)**

G2G also called e-administration. It deals with the activities that take place between different government organizations/agencies such as file tracking, communication, fund transfer, shared services, law enforcement, revenue etc. It harness ICT to streamline administration procedure, downsizing bureaucracy and improve government procedure by cutting cost; increase speed of transactions, reduce manpower and improve the consistency of outcomes\(^6\).

**Government to Business (G2B)**

There are multiple ways of how government interacts with business such as taxes, contracts, orders, payments, opportunities, supplier offerings and licenses. In G2B it is possible to achieve cost reduction more quickly that with other government agencies. The G2B sector receives a significant amount of attention because of the

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high enthusiasm associated with business and the potential for leading costs through improved procurement provider and increased competitions\(^7\).

**Government to NGO**

Governments build interaction beyond the boundaries of government by developing communities and civil societies. It also involves building various associations and interest groups that ensures the betterment of the society\(^8\).

### 1.3 E-GOVERNANCE IN INDIA

In India, the concept of e-governance has emerged during the 80s. Both center and state governments have initiated measures to promote ICT in the area of defense, economy monitoring, planning and development and in all other spheres of lives of citizens. For the implementation of ICT, government of India introduced an Information Technology Policy (ITP) in the year of 1998. In the same year National Task Force (NTF) on Information Technology and Software Development was launched by Prime Minister\(^9\). Later on government introduced Information Technology Act, 2000, in order to facilitate growth of e-commerce and electronic communication through Internet and IT. The government enacted the Semi Conductor Integrated Circuits Layout Design Act 2000, for advancement of technology. Further, Community Information Centers (CIU) was set-up in 486 blocks in the Northeast and Sikkim as a part of the Prime Minister agenda for the socio-economic development and to provide connectivity at the block level\(^10\). The government of India approved the National E-Governance Action Plan for implementation during the year 2003-2007. The plan laid the foundation and provided the impetus for long-term growth of e-governance within the country. The plan created Projects in the Mission Mode at the center, state and integrated services levels to create a citizen-centric and business-centric environment for governance. As part of the strategy to increase trust on e-governance, the Ministry of Information and Communication Technology.

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Government of India created a Center for E-Governance (CEG) at its premises - Electronic Niketan in New Delhi. This Center showcases the applications and solutions that have been successfully developed in various states and offers such other services like technical consolation with the objective of collecting and distributing the best practices in the area of e-governance.

At the central level, each Ministry and Department has created its websites to provide online information and these are being updated regularly. The government departments to provide online submission of Research and Development (R&D) proposals are using e-offices. The Universities are networking their libraries through a network called as ‘INFLIBNET’. Recently e-court has been implemented in Delhi, which provides detailed information about courts cases. Number of other departments, such as registration, Commercial Tax, Transport, Ration Card and Public Distribution, Treasury, Health, Municipalities is using IT in different forms\textsuperscript{11}. A number of states in India have also initiated various e-governance initiatives.

\subsection*{1.4 E-GOVERNANCE IN STATES}

In tune with International and national developments, various states governments have also taken innovative steps to promote e-governance. They have drawn up a roadmap for IT implementation. Various projects are being implemented for improving the service delivery to the citizens through ICT. One such step is the establishment of service centers. These service centers are established in public-private partnership mode and are providing multiple online services, such as, payments of taxes, land record, driving license, registration of birth, deaths and marriages, payments of water, telephone and electricity bills, issue passport, bus passes and old age cards etc. Through online services citizens have benefited from reduced delay and multiple solutions at one counter. As a result, transparency, accountability and efficiency in administration have been increased\textsuperscript{12}. E-governance initiatives of select states have been presented follow:

\textsuperscript{11} Diganta Kumar Das (2005), “Information and Communication Technology (ICT) and India’s Development: Achievements and Challenges Ahead”, \textit{Journal of Services Research}, December, pp. 93-108.

Andhra Pradesh

Andhra Pradesh has emerged as one of the leading state in India in e-governance applications. The state government has implemented a comprehensive plan to utilize the Information Technology (IT) in government for enhancing efficiency, transparency, accountability in government departments and agencies and providing better services to citizens. The major IT projects of Andhra Pradesh Government are: Andhra Pradesh State Wide Area Network (APSWAN), which provides connectivity between the state secretariat and each of 23-districts for data, voice and video communication. Computer-aided Administration of Registration Department (CARD) is another project, which has computerized all the operations of 214 sub-registrars offices for digital registration of property. The project APDMS, combines GIS with data from remote sensing satellites, consisting of base maps of mandals and constituent revenue villages and habitations together with thematic data on the road network, community infrastructure, basic demographic data, soil and geomorphologic data etc. Fully Automated System for Transport (FAST), helping in providing services such as driving licenses and registration of vehicles. Twins Cities Network Services (TWINS), project provides variety of services under one roof. Under this project, 39 e-seva centers and 350 services centers were established to provide services to the citizens. The services include payments of electricity, water and telephone bills, registration and issue of birth/death, caste and nativity certificates, sale and receipts of applications for passport and telephone connections, driving license etc. these projects have been improving the life of masses by providing multiple services through a single window system and brought transparency and efficiency in the government administration13.

Chandigarh

The city beautiful is not behind in the race of e-governance. Chandigarh administration has launched e-governance initiatives under the name of “e-Sampark” These initiatives are established at different locations in the city. The “Sampark” centers are providing number of public services on a single window and helping in improving citizen satisfaction and enhancing the efficiency and transparency of

government. The project “Gram Sampark” established in rural area which provides public services to the masses of the rural area.\textsuperscript{14}

\textbf{Delhi}

In April, 2005 Information Technology Park (ITP) was inaugurated in the capital of India. The government of Delhi has been putting more emphasis on IT. The sale tax department is one of the first in the country to be fully computerized. This department provides on line services like registration, filling and processing of returns, details of tax deduction and receipts of forms etc. The website of Delhi Transport Corporation (DTC) is providing important information to citizens regarding bus routes, details of pass centers, pass application forms. Recently the government has introduced IT in judicial system and established e-court in the capital to make the judiciary effective. The state is using Automatic Vehicle Tracking system (AVTSPS) which is based on Global Positioning System (GPS) and Geographical Information System (GIS) technology with trunk radio based communication between the busses and a control room.\textsuperscript{15}

\textbf{Gujarat}

The government of Gujarat gave the first priority to access and networking. The state has planned and implemented the project “State Wide Area Networks” (SWAN). This project provides opportunity to all government officers to host and manage their websites locally. The web sites provide online local information to the citizens. The government of Gujarat has established a project “City Civis Centers” (CCC), which allow the citizens to avail facilities like paying property tax, death/birth certificate, water tap and drainage connections, building plan approval, etc. Another project “Mahiti Shakti” (MS) provides on line information to the citizens pertaining to ongoing schemes run by the “District Rural Development Agency (DRDA) and Tribal Area Sub Plan (TASP). Citizens can download forms by paying a prescribed fee. Another very important project for redressal of public grievances is “Tale Friend” (TF) under this project a four-digit telephone number 1505 is allotted to people.


People can deposit his/her complaint from anywhere in the state by making a local call.16

**Himachal Pradesh**

Himachal Pradesh has entered into new era of e-governance with the launch of the “Himachal Pradesh State Wide Area Networks” (HIMSWAN), which link all government departments up to panchayat levels to facilitate better public services under the HIMSWAN. The project “Sugam” community services centers has been launched, which provide one stop information services like high court case list, vidhan sabha list of business, public utility forms, examination results registration of electors, pensioners help lines, tender notices, vacancy announcements, electricity bill payment, blood donor lists, online bus tickets etc. Another project “e-smadhan” has been launched by the state for online submission of grievances application to respective departments. State has launched online “Police web Portal” that provides online traffic challan payments, registration of complaints, and search of first Information Reports (FIR) etc. Government of Himachal Pradesh has started project “e-salery” for its employees, which provides online salary details to government employees.17

**Karnataka**

In the state of Karnataka, Government took a step to make decentralized the process of providing services through their e-governance projects. E-governance projects have been established in many districts of the state. The project “Bhoomi” was initiated to computerize the entire land records and farmers can get copies of their titled deeds. The project “Nondani” is another e-governance initiative, which has made land registration simple and easy for the citizens. “Khajane” project involves in intensive computerization of the treasuries all over the Karnataka. The project serves the pensioners of government services, art and culture, sportsmen, journalists and freedom fighters. The treasuries act as bankers to 4500 panchayats, taluka panchayats, gram panchayats and municipal corporations. Karnataka government has made online market through project “Reshme” it provides online transactions in the silk market and it has brought a lot of transparency in market operations. In addition to these

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17 http://himachal.nic.in
projects state government has introduced many other online services, such as online agricultural price information and employment information.  

**Maharashtra**

Maharashtra Government has developed many e-governance initiatives; some of them are “Kosh Vahini” (KV) this project helps in maintenance of revenue of the state. There is another project named “Land Record Management System” (LMIS), the project has made it easier for citizens to obtain their land records information and eliminates the delays in getting the information from the various government offices. The project “SETU” is great example of G2C relation. Government has established 250 Setu Information Centers (SIC) across Maharashtra, which provides many public services to the peoples at a single window.

**Punjab**

Punjab is one of the states, which is leading in Information Technology. State has initiated e-suwidha, it provides convenient one point services to the citizens. They can avail the services such as affidavits, arms licence, copy of registry record; demarcation; mutation; criminal cases etc, learning licence and passport. It has created database in Geographical Information System (GIS) and made available IT to public, panchayats and state government departments. State has established many e-governance initiatives such as: District Information System (DIS) containing village and town database. The state has established Courts Information System (COURTIS), which provides information about court proceedings and cases. Another information system was established by the state named Assembly Information System (AIS) that provides information regarding state assembly. For providing the online services to the people of district and villages in the state a new project has started, which is known as Computerized Rural Information System (CRISP).

**1.5 E-GOVERNANCE IN HARYANA**

Haryana, the Karambhoomi emerged as a separate state in the federal galaxy of the Indian Republic on November 1, 1966, with just 44212-sq.km area, which is 1.37% of

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19 http://maharastra.nic.in
20 http://punjab.nic.in
the total geographical area of the country. There have 21 Districts in the state, further it is divided into 67 Tehsils, and 6759 villages. According to the 2011 censes, the population of the state is 2, 11, 44,564 with 1, 13, 63,953 males and 97, 80, 611 females and the rural population is 1, 50, 29, 260 and urban population is 61, 15,304.

Haryana has carved a place of distinction for itself during the past three decades, whether it is agriculture or industry, canal irrigation or rural electrifications. Haryana has marched towards modernity with leaps and bounds. Today, the state is enjoying the unique distinctions in the country of having provided electricity, metal led roads and potable drinking water to all its villages within record time. It is among the most prosperous state in India, having one or the highest per-capita income in the country.

The government of Haryana has outlined its Information Technology (IT) policy by stating in its preamble that, “The state Government recognizes the role of IT as an effective tool in catalyzing economic activity, in efficient governance and in developing human resource. This policy seeks a deep impact initiative by the state Government in encouraging replacement of traditional delivery system of public services by IT driven system of governance that works better, cost less and is capable of serving the citizen’s needs with ease”.

The Government of Haryana has given a special emphasis on implementing mission mode e-governance project, identified under the national e-governance plan. Haryana has an IT vision and a dream that is all citizens should access government and private sector services from their own villages and towns. The state e-governance vision statement is “To achieve Efficiency, Transparency and Accountability in governance by providing ICT enabled access and opportunities for all, anywhere, anytime”.21

The core and support infrastructure under the governance plan includes:

- State Wide Area Networks (SWAN)
- State Data Centers (SDCs)
- Common Services Centers (CSCs)

21www.hartron.org
**SWAN (ADHAAR):** Haryana is the first state to launch SWAN on 6th February 2008, under the project name ADHAAR. Under this project, local Area Networking (LAN) has been established in all major buildings at State Headquarter and Districts Mini Secretariats. All offices in major buildings have been provided computers with dedicated e-mail/ Internet access facility. The SWAN vertical connectivity at State Network Management Centers (SNMC), District Network Management Centers (DNMC) and Block Network Management Centers (BNMC) has been completed and made operational.

**State Data Centers (SDCs):** The State Data Centers based on State Area Network (SAN) technology has been established at civil Secretariat with 8 Terra Bytes (TB) storage capacity. All the mission critical servers are installed in this data center in a secure Demilitarized Zone (DMZ). The interactive contents of major state website and official e-mail accounts are hosted on this data center. The SWAN is connected to this data center. To integrate the SWAN and CSCs infrastructure and to have a common central repository of all applications and data, a large scale State Data Center with 35 TB storage capacities is being set-up under the National E-governance Plan (NeGP), a scheme of Department of Information Technology (DIT), Government of India (GOI).

**Common Services Centers (CSCs):** The Government of Haryana has implemented the common services centers scheme in the state. It has successfully established 1159 rural Common Service Centers (CSC) also known as “E-DISHA EKAL SEVA KENDRA” throughout the state as single window services delivery point for government and business and citizen services. Another 55 CSCs, in urban areas and 49 show case CSCs at District Headquarter have been made functional.

The CSC scheme in Haryana has 3-tier implementation frameworks: -

- At the first CSC level is the local Village level Entrepreneur (VLE) to service the rural consumers in a cluster of 5-6 villages.
- At the second level is the Service Center Agency (SCA) to operate, manage and build the village level Entrepreneur networks and business.
- At the third level Hartron, the State Designated Agency (SGA) to facilitate implementation of the scheme within the state and to provide requisite policy, content and other support to Service Center Agency.
Under the scheme, Master Service Agreement (MSA) for the implementation of the CSC scheme in Haryana was signed on April 17th 2007, between Financial Commissioner (Information Technology) on the behalf of Government of Haryana and the Managing Director of Hartron. At present, the following services have been integrated and offered from CSCs (E-DISHA EKAL SEVA KENDERA) centers for the people Forms & Procedures; Birth & Death Certificate of Urban Areas; House Tax Collection, Billing and Query; Social Welfare Schemes Application acceptance; Caste & Residence Certificate Issuing; Passport Application collection; Arms Licence; License: Permanent Driving License/Duplicate/Renewal; Vehicle Registration Certificate; Touch Screen Kiosk for Revenue Records & House Tax Data query; E-ticketing and Education consultancy services.

These are the services, which are being provided by the Common Services Centers in Haryana. Following is the list of various G2C services, which are being delivered through the Common Services Centers (CSCs) presented in Table 1

**Table-1**

<table>
<thead>
<tr>
<th>Department</th>
<th>Services</th>
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<tbody>
<tr>
<td>1 DHBVNL/UHBVNL</td>
<td>• Electricity Bills</td>
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<td>• Out Standing Bill Statement</td>
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<td>2 DC/ADC/SDM Office</td>
<td>• Domicile Certificate</td>
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<td></td>
<td>• Income Certificate</td>
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<td>• Handicapped Certificate</td>
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<td>• Senior citizen Certificate</td>
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<td>• Encumbrance Certificate</td>
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<td>4 Food and Civil supplies</td>
<td>• Ration Cards</td>
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<td>5 Social Justice and Empowerment</td>
<td>• Receipt of application for Social beneficiary schemes</td>
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<td></td>
<td>• Disbursement of Pension</td>
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<tr>
<td>6 DC/ADC Office/DRSAs</td>
<td>• BPL Cards</td>
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<td>7 BSNL</td>
<td>• BSNL Bills, Phone Cards</td>
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<td>8 PWD Public Heath Department</td>
<td>• Water Bills</td>
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<td></td>
<td>• Sewerage Charges</td>
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<tr>
<td>9 Excise &amp; Taxation Departments</td>
<td>• Payments of Taxes</td>
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22 www.haryana.gov.in
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<tr>
<th></th>
<th>Department</th>
<th>Services</th>
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<tbody>
<tr>
<td>10</td>
<td>Urban Development Department</td>
<td>• House/property Tax&lt;br&gt;• Fire Tax</td>
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<td>11</td>
<td>Transport Department (Roadways)</td>
<td>• Issuance of Bus Passes&lt;br&gt;• Long Distance Bus Tickets</td>
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<td>12</td>
<td>Transport Department (Regulatory)</td>
<td>• Driving License – New/Renewal&lt;br&gt;• Vehicle Registration Certificates-New/Transfer</td>
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<td>13</td>
<td>IT Department</td>
<td>• IT Returns Filing</td>
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<tr>
<td>14</td>
<td>Agriculture</td>
<td>• Agri Consultancy</td>
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<td>15</td>
<td>Education</td>
<td>• Admission Process&lt;br&gt;• Examination Results</td>
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<td>16</td>
<td>Employment</td>
<td>• Registration&lt;br&gt;• Job Opportunities</td>
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<td>17</td>
<td>Municipal Committees /Health</td>
<td>• Birth Certificate&lt;br&gt;• Death Certificate</td>
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<td></td>
<td>Department</td>
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<tr>
<td>18</td>
<td>Police Department</td>
<td>• Tenant Registration&lt;br&gt;• Servant Registration&lt;br&gt;• Challans</td>
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<td>19</td>
<td>Registration and Stamps</td>
<td>• Sale of Stamps, Market Value Assistance</td>
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<tr>
<td>20</td>
<td>Regional Passport Office</td>
<td>• Collection of Passport Applications</td>
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<tr>
<td>21</td>
<td>Grievance Department/RTI</td>
<td>• Online Grievances System</td>
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</tbody>
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Sources: http://gurgaon.gov.in/edisha.htm

Thus the Government of Haryana after announcing its Information Technology (IT) policy has made serious efforts in implementing it by announcing series of measures. Although numbers of years have passed, no serious attempt has been made to study these initiatives. The present study is a step in this direction.

1.6 REVIEW OF LITERATURE

A large number of studies have been undertaken in the research field under consideration. Selected studies have been reviewed under four heads: (a) Citizen’s Satisfaction (b) Improvement of Administration (c) Citizen’s Participation (d) Hurdles in E-governance.
(a) Citizen’s Satisfaction

Dey (2000)\textsuperscript{23} has focused on the present status and future potential of e-governance in India. The Author analyses some serious problems and challenges that confront implementation of e-governance in India. According to him e-governance transforms life of people through efficiency, transparency complete objectivity and prevents from mal-practices. E-governance has tremendous potential to provide better services to citizens.

Rattan (2001)\textsuperscript{24} in his study he has examined that the Chandigarh information technology policy, which has an aim to provide better public services, promotion of industry and business, reduce unemployment and increase software exports. He assumes that e-governance initiatives can improve the quality of life of people by use of information and communication technology (ICT). Significantly, the mission is to strive to make Chandigarh an ideal destination by providing public services for the residents through efficient, speedy and cost effective e-governance.

Donnelly and McGuirk (2003)\textsuperscript{25} researchers focused on the role of e-governance, which has been providing public services in U.K. through e-fire project. The study defines that project helping in reducing fire caused accidents, injuries, death and loss of property etc. Authors say this type of modernization of public services is helpful for socio-economic development of a nation.

Ahmed (2004)\textsuperscript{26} has examined the current position about e-readiness in general and higher education in particular and prepossesses a tool for evaluating e-readiness in higher education in India. He has analyzed how e-readiness is emerging as a key for social development by providing higher education through information and communication technology (ICT) and highlights the features of e-readiness in education. It discussed two challenges diffracted ICT in higher education: less awareness about technology and lack of coordination among different institutions


Aneja (2005)\textsuperscript{27} state that e-governance has an aim to create better government. Then he examine the objective of e-governance in government operations which helps in provide better services to the people and highlight how e-governance at global level is providing services and helping socio-economic development. He has also studied the political, social, economic and technological aspect of e-governance with the help of strengths; weakness, opportunities and threats (SWOT) analysis. In addition he discusses few principles to be used for reinventing the government.

Asgarkhani (2005)\textsuperscript{28} define that e-technology has became a catalyst for enabling more effective government through better access of services and the democratic process. He discussed some of the key aspects of electronic government and e-services. He examines the values and the effectiveness by focus on four specific facets of effectiveness: the view of management and ICT strategists; social, cultural and ethical implications; the implication of lack of access to ICT; and the citizen’s view of the usefulness and success of e-service initiatives.

Gilmore and D’Souza (2006)\textsuperscript{29} state that government sector as well as private sector has been engaged in providing excellence service since loge time. The introduction of e-governance has made it possible to provide online services in recent years. This study has focused to measure the e-governance quality with reference to India. Further the study providing a conceptual model of indicating the extent that how can be the services within the public sector categorized. It provides useful insights to those managing e-governance and service providers providing the service.

Kumar and Singh (2006)\textsuperscript{30} have made detailed study of “Lokvani” public private partnership program, which is providing various online public services to the citizen, which include land record, arm licenses and on line public grievance redresses system. The study concludes that the project has resulted in enhancing transparency, accountability and efficiency in delivery of services, and promoting citizen friendly environment; reduction in corruption and saving in costs and time.

\textsuperscript{28}Mehdi Asgarkhani (2005), “The Effectiveness of E-Services in Local Government: A Case Study”, www.ejeg.com
Monga, Mehta and Singh (2006) in their paper have studied e-governance initiatives in different states and focused especially e-sampark centers of Chandigarh which is utilizing the services of private sector to provide multiple services to the citizens through a single window system. Authors have finds that these e-governance initiatives helpful in increasing quality of public services and make the administration more responsible and accountable. At the end they recommended some suggestions to improve the performance and efficiency of e-smpark centers.

Palvia and Sharma (2007) said that e-governance deliver information at national or local level and provide services to citizens or business or other government agencies at one-stop internet gateway. They highlight the benefits of e-government that it provides services to citizens in a timely manner, better services delivery and empower through access of information without the bureaucracy. In addition they say that it improve productivity and cost saving in doing business with suppliers and customers of government.

Sangita and Das (2007) they examined the reforms of e-governance, which is establishing smoother interface between government to citizen, citizen to government, government to business, business to government, government to NGO. Authors have analyzed that; e-governance initiatives have broadened the scope of government and increased the quality of public services. Authors suggest sound policy, adequate infrastructure, trained manpower; collaboration cooperative services and people participation is essential to promote e-governance.

Singh (2007) define that emergence of e-governance has enhanced the efficiency, effectiveness, transparency and promoted information system. Through this study author has examined the impact of electronic services delivery at national and state level. He has briefly analyzed the sampark centers, which provide electronic service delivery in the Union Territory, Chandigarh.

Ya and Bretschneider (2007)\textsuperscript{35} this article focuses on contracting (public private partnership) out of e-government services at state level by the government. The authors have found that, the political and economic rationales affecting the government decision to contract out e-government services. This article tests the extent to which economic and political rationality influence government contracting decision.

Pathak, Naz, Singh and Smith (2010)\textsuperscript{36} have conducted a study at Port Moresby, capital of Papua New Guinea (PNG). The study indicates that e-governance has the potential to improve the public service delivery and service quality. Further study found that expectations of citizens from public services are very high and there is huge variance in the perceptions and expectations of citizens regarding the service delivery and quality of services. Authors suggested that there is urgent need to in PNG to employ e-governance in all public agencies to improve service quality.

P.M. Shankargouda (2010)\textsuperscript{37} highlighted that in the global competing world, governments need to adopt electronic techniques for its operations. He said now e-governance is essential for the reason that it can transform citizen services, provide access of information to empower citizens and enable their participation in government. Author discussed the experiences of Karnataka State Police Housing Corporation Ltd (KSPHC) that has introduced the system of e-governance in all its operations. KSPHC providing various online services to the citizen such as e-tendering, online Right to Information through www.ksphc.info and e-point book etc.

Singh (2012)\textsuperscript{38} examined the impact of e-governance initiatives on the public services delivery system. Further study highlighted that with the introduction of e-governance the efficiency and effectiveness of the administrative system has increased and the mechanism of information sharing also developed. In the end he state that e-governance provides SMART i.e. simple; moral; accountable; responsive and transparent citizen centric services to the citizens


Patel, Patel and Biju (2013)³⁹ have made study on Gujarat government initiatives in terms of started using latest technology to provide immediate response their citizens. Further researcher have described about the e-governance and its basic issues. In addition study has pinpointed the facility provided by the Gujarat government. Study has concluded that the initiatives have taken by the Gujarat government has been facilitating the citizens to availing the services at their doorstep.

Pathak and Kaur (2014)⁴⁰ observed that the adoption of e-governance is an essential for every government. Study says that e-governance has potential to provide variety of public service to both rural and urban area. Further authors said that today in India, e-governance has been empowering every sector. Government has initiated various projects in the area of education, police, Judiciary, administration and agriculture. At the end authors have said that various problems has been faced by these projects i.e. unavailability of fund and lack of IT awareness among the people.

(b) Improvement of Administration

Mukhapadhyay (2000)⁴¹ has analyzed the changes brought by fast developing Information Technology (IT), he examine the impact of information technology on the administrative culture affecting both structure and nature of administration. IT is constructing information superhighway and free and easy access of information. Study emphasis on team spirit, transparency and free flow of information for good governance.

Sudan (2000)⁴² defines that Information Technology (IT) is helping in realizing simple, moral, accountable, responsive, transparent, (SMART) government. Author has presented the achievements of government through e-governance in the form of investments in lying of state wide optic fiber and digital networks; state wide wireless communication networks. Study finds that various IT based projects in Andhra Pradesh is providing various services to the citizens. Author recommends that strong political will is required for successive e-governance.

Kalsi (2002)\textsuperscript{43} in this paper he has explained the role and ambit of information system in the government strategies. Author provides a detailed road map with policy framework and infrastructure and describes the four phases required for implementation of information system in the government organization. He opines that by the use of information system, citizen can access information and process can became transparent.

Sharma (2002)\textsuperscript{44} in his paper he has explained that how in present times, use of information and technology in good governance is being practiced. He says e-governance should not be viewed as a more technological initiative but as a part of the process of governance. The process prospective looks at governance beyond the analytical or technical dimensions and incorporates the organizational and behavioural dimension as well. He observed that, the behavioural dimension is the case of the failure of several e-governance initiatives. It finds several underdeveloped countries that have successfully used e-governance. India does not lag behind in term of the technology, but there is need to develop a holistic approach to e-governance.

Sachdeva (2003)\textsuperscript{45} has analyzed that information and communication technology (ICT) has a valuable potential to meet the goals of good governance. He highlights the various challenges hindering implementation of e-governance and then he gives a ten-point strategy for implementing e-governance in India. He brings the objective of achieving electronic governance (EG) beyond mere computerization of stand alone back office operation and bring the idea of fundamental change as how the governance operate. Study identified the new set of responsibility for the executive, legislation and citizens.

Dhameja and Medury (2004)\textsuperscript{46} in their article examined the use of information communication technology in the governance to improve the performance. Authors say ICT is an efficient tool, has capacity to create transparency, efficiency, openness and re-engineering organization in the governance. Researchers say ICT is useful for socio-economic development and establishment of good governance.


Singh, Agrawal and Sahu (2004) in their study they analyzed that decision-making is most important aspect of government, which is more time consuming and complex task. Study says information and communication technology (ICT) is only tool that can improve the decision-making in the government significantly and bring the real benefits of the e-governance to its citizen.

Chaudhary and Gautam (2004) have examined the impact and role of information technology in the organization functioning and bring new changes by technology for providing better services. According to her e-governance is using electronic in procedure and faceting governments. She says this not only involve changes in the strategies but also changes in the structure of the organization. This paper attempts to identify and understand these changes in the structure of organization in the new era of e-governance.

Naidoo (2004) in his paper author examined that how globalization and Information Technology (IT) impacting on developing countries; IT conduct their business and implement their day-to-day activities. According to author e-governance is tool which can enable the developing countries to create new market opportunities and helpful for providing quality services to the masses. The study examines the introduction and implication of the electronic model for governments in developing countries.

Saxena (2004) has defined that e-governance initiatives are almost common in most countries including industrial, developing and under developed. According to researcher, unfortunately most of the initiatives have not been able to get the claimed benefits. He has explained the reason for this failure is a techno-centric focus rather than a governance-centric focus in the initiatives. The paper explains the necessary attributes of governance-centric initiative under the shade of excellent government

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and describes a methodology called e-governance engineering that will ensure excellence in e-government implication.

Holliday and Yep (2005)\textsuperscript{51} article analyses the progress of e-governance initiatives in China and the changing official position of the past two decades. Authors consider the significance of contemporary e-government activities of Chinese government. He defines current e-government impact on public sector and hoped for developed future.

Brewer, Neubauer and Geiselhart (2006)\textsuperscript{52} study explained the impact of Internet and information communication technology on government and highlight the emerging challenges and opportunities of Information Technology (IT) in government. Then they define that how e-government system is improving the instrument process of government. Authors argue that public administration should take an active role in designing and implementing e-government system with democratic values.

Cook and Horobin (2006)\textsuperscript{53} have explained that e-government is a part of development strategies. Author analyse e-government is using Free and Opens Software (FOSS) that creates balance of intellectual property at both domestic and international level. According to them FOSS base e-governance is very useful for developing country’s development and it maintained balance between developed and developing countries.

Sharma (2006)\textsuperscript{54} in his paper explained that e-governance can be formulated in government and all sphere of life but the success lies in its well implementation. According to him it requires continued and innovative thinking to upgrade the quality to become user friendly and efficient. In this paper author has explained personal information and management system (PIMS), which is implementing e-governance practices in personnel administration at both union and state level government. It has 35000 employees in its database. He says it empowers the citizen, employees,

administration and government. Study has explained the challenges faced in its formulation and implementation.

**Gessi, Rammarine and Wilkins (2007)** in their paper define the new e-governance framework in commonwealth countries that’s vision is “ICT socialism” coupled with strategic business acumen. The literature recognizes that strong e-leadership and stakeholder’s cooperation is tool to the success of e-governance.

**Mishra (2007)** states that e-governance is a tool, which is reducing corruption, creating transparent, accountable, sustainable, reliable and efficient system for delivering public service to the citizens. According to him Information Technology (IT) alone cannot be effective; so he argues that e-governance is required planning, administrative strategies and efficient use of resources and most important is required strong political will to combating corruption. In addition recommend policy to improve the e-government strategies to remove corruption.

**Monga and Malhotra (2007)** has expressed that e-governance is a paradigm shift in the field of public administration and analyse that e-governance has a potential to remove the inequalities of government. Study find that ICT in government can bring a change in the quality of services; can make the system more transparent, simple, and accountable. It also helps in better record management, efficient personal dealing and reduce the scope of corruption.

**Nair (2007)** the article says that e-governance is the step towards digital democracy and helps in improving the administration culture of government. Author highlighted the benefits of e-governance that it provides vital input to the government’s policymaking process and make government accountable. He says that e-governance speed up routine administrative functions, enable government to work better, yields higher revenue growth and cost less. In addition he says that citizens can freely interact with various government departments anytime anywhere with maximum speed and with minimal efforts and says this is digital democracy actually means.

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Sodhi (2007)\textsuperscript{59} has defined those electronic delivering basic and regulatory services to the citizens. The electronic services improve transparency, accountability and efficiency in delivery of services and also reducing corruption. Author further noted that the process of Information Technology (IT) and E-governance is simple, easy, low cost, and provide greater transparency in government operations. Author concluded that IT is also helpful in enhancing quality of services to rural, privileged and downtrodden section of society.

Filho (2009)\textsuperscript{60} explore that the use of information and communication technologies (ICT) in the Courts has been increasing transparency and effectiveness. Further author said that by using ICT in courts the transparency and effectiveness to the judicial acts has improved. Further he state that the use of ICT in courts haven’t the same result due to some factors i.e. their web pages do not have all the features available and their users are unable to use the new technologies. In the end he demanded to establish an empirical model of e-governance; the citizen characteristics should be properly understood along with other factors before developing an effective e-government adoption strategy. The model should to be empirically tested to determine its validity and reliability before its adoption.

P. Muralidhran (2010)\textsuperscript{61} says that ICT has brought a fundamental change in almost everything such as working, communication, learning etc. Author predicts that e-government will bring unprecedented opportunities for innovative result oriented public-sector leadership. He said it requires a significant organisational change that can bring government enterprise transformation from industrial society to information society. Thereafter author said e-government online services can revolutionize the relationship between government and citizen, business and its employees as well.

Sanjeev Kumar (2010)\textsuperscript{62} discussed that ICT revolutionized citizen’s charter; it created an enabling environment which took citizen services centric governance to altogether. He said e-government not only fulfilled the great promise that the charter


heralded but e-government has expended the boundaries of transparency, responsiveness and accountability.

Singla and Aggarwal (2011) explore the impact of e-governance in terms of minimising corruption by analysing various projects of Punjab state. Further they have attempt to analysis some successful e-governance projects implemented in Punjab. The result of the study shows that e-governance resulted in elimination of corruption and due to this the efficiency has improved in public delivery system along with transparency. In conclusive statement the authors’ points out that e-governance is a strong weapons for combating the corruption and development of transparent public delivery system in Punjab.

Mistry and Jalal (2012) in his study he has examine the relationship between e-government and corruption in developed and developing countries. Further author has investigated that by using the ICT are changes appears in the level of corruption and for this empirical models has developed by the author. Findings of the study show that if the use of ICT increases e-government corruption decreases. In addition it was also find that the impact of e-government is higher in developing countries than in developed countries.

Singla and Aggarwal (2012) explore the e-Governance initiatives taken by the Punjab government. Further study has attempt know the impact of e-Governance projects and the scope of e-Governance in the State of Punjab. In addition they highlighted that why implementation of e-Governance has failed in rural areas of the Punjab. Further authors have also indicated the factors of e-governance which control the corruption. But they point out that computer education is required to create awareness regarding e-governance projects. At the end they have made some specific recommendations for the efficient and effective implementation of e-Governance in the state of Punjab.

Uddin (2012) highlighted that e-governance is a strategic tool that improves access to information, participation of citizens, efficiency, prompt service delivery, reduce corruption, transference and accountability etc in the public sector. Further study found that e-governance can introduce reforms in public administration and can change the traditional mode of interaction between the state organizations, business organizations and citizens. In addition study has tried to find out the organizations having good in e-governance. In the concluding remarks authors state that e-governance should be used systematically in the organizations.

Vig (2012) explore the role of e-governance in making better corporate governance. The study says that e-governance is a tool through which a fair and transparent relation can be built among the various stakeholders and in all its transactions. Further he said e-governance has playing a vital role in expanding the scope of corporate governance and can also check the frauds being committed by companies. The study highlights the present status of the usage of e-governance in administration of company law and corporate governance. In conclusion he said e-governance ensure transparent and accountable information infrastructure throughout the company.

Bharti and Dwivedi (2013) highlighted the use of ICT in public transportation for improving their mechanism for service delivery. Further study has explained the present situation of public transportation in India and e-governance initiatives taken in this direction. They also define that public transportation can be integration and nationalization through effective implementation of e-Governance in this area. In the end authors have focused on integration of various State Road Transport Corporation’s through a common service delivery gateway using existing National e-Governance Service Delivery Framework.

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Malik, Dhillon and Verma (2014)\textsuperscript{69} in their paper have highlighted the role and potential of information and communication technologies (ICTs) for achieving the good governance. They outlined the three main contributions of e-governance as well as two major challenges of developing countries. Further this paper has focus on the present status of e-governance in India and highlighted the vision and objectives of the Twelfth Five Year Plan. The study concludes that in spite of poor infrastructure, poverty, illiteracy, language dominance and all the other reasons India has been doing good in e-governance projects. The study suggested that effective promotion of e-governance by the Indian government can also be a boosting factor to provide quality services to their citizens.

(c) Citizen’s Participation

Pardhansaradhi (2004)\textsuperscript{70} has examined the role of information communication technology (ICT) in government, which has changed the organizational structure and playing a vital role to establish different communication network. Study defines that ICT helping in increasing the people participation and transparency, enhancing efficiency and effectiveness in delivery of public services to the people. Author highlights various problems and area of concerns that need to be given immediate consideration on implementation of ICT to make efficient governance.

Gupta and Sharma (2004)\textsuperscript{71} in their study examined that e-governance is a basic necessity to improving the G2C (government to citizen) relationship. In this context researchers put special focus on Andhra Pradesh e-government initiative, e-seva. Paper defines detailed study in direction of utilizing the SERVQUAL instrument and looks at the service quality provide by the state. In addition paper make a theoretical contribution in the innovation of new models of service delivery, at the end authors have provided some direction for future research.


M.M. and Cowley (2006)\textsuperscript{72} researchers said that the information and communication technology is tool to promote citizen participation in the planning process. The analysis is based on an examination of municipal planning related Web Sites. Authors highlight the dominance of simple, information-based e-government tools and suggest that population-related and geographic-related variables are significant and pervasive influences on the provision of these tools.

C.J. and K. (2006)\textsuperscript{73} state that the e-governance has been proposed as a way to increase citizen trust in government and improve citizen evaluation of government. Authors examine the Pew survey data, which suggest that e-governance can increase trust by improving interactions with citizens and perceptions of responsiveness. Authors define attitudes towards government including trust, are core concern for democratic governance and public administration.

Rao and Bikshapathi (2007)\textsuperscript{74} in their study authors have analyzed the role of e-governance to provide tender related service through e-procurement public private (PPP) partnership project in Andhra Pradesh. Authors define that project has increase the participation suppliers and empower small and medium sized suppliers. In addition project helping in reducing the processing time, cost and in term of social responsibility. It reduces cartel formation amongst contractors and suppliers.

Milakovich (2010)\textsuperscript{75} in his study he has examined that Information and Communication Technology (ICT) play efficient role in promoting citizen participation. Further he suggests that how Information and Communication Technology make possible citizen participation and he also identified the challenges facing by governments in adopting internet-based ICT strategies.

Mittal and Kaur (2013)\textsuperscript{76} analyzes the e-governance initiatives of Punjab government. Further author’s state that in tune with National e-Governance Plan, the


government of Punjab has also took various initiatives to implement e-Governance in the state. Thus study has discussed in detailed the various ongoing e-governance projects in the state. The study further depicts that the prime objective of e-Governance implementation is to improve the citizens’ participation in the decision making. In the end they have made suggestion government of Punjab should concentrate to implement the e-governance projects in rural area as well.

Haider, Shuwen and Hyder (2014)\(^7\) have said that e-government is a tool through which citizen’s participation can be possible. Further they indicated that, citizen’s participation can bring very fruitful results i.e. control corruption, to judge government policies, to make better delivery of government services, cost saving by electronically, citizen empowerment, especially in decision-making. The study has main focus on to find out the challenges faced by citizens while participating in e-government services and what the government has done to promote citizen’s participation in e-government services in all over Pakistan. Study find that government have to develop new ICT policy; motivate strategies with enthusiastic implementation plans for encouraging the citizen’s participation in E-government services. In addition to this government should provide more online multi-channel services, which in turns encourage the ICT awareness programs, infrastructure, computer education, literacy and maximum internet connectivity for all users. Form the citizen’s side, citizens also show their positive, enthusiastic, attitude towards e-participation in e-government services in Pakistan.

(d) **Hurdles in E-Governance**

Rajan (2003)\(^8\) said that the information technology is reached in rural area and targeted first those authorities of the rural area that are the part of market economy and close to the interfaces of government but not for the poor and underprivileged section of society. According to the researcher information and communication technology must be reach to the rural masses by using low cost computing, solar and other non-conventional energy devices to provide better services and for the uplift of social and economic life.

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Dugdale, Daly, Papandrea and Maley (2005)\textsuperscript{79} have defined that digital divides in 
the Australia. Study examined that the biggest user of government services are the 
least likely to be connected to the Internet. They opined that how these unconnected 
to be connected with Internet. Study suggests that the attention should be focused on 
human capital development to reduce the digital divides. Then they explained the 
factor needed for success in building socially marginalized communities’ interest, 
developed capacity to interact and communicate through online technology.

\textbf{Jho (2005)}\textsuperscript{80} study defines the conflict between government and civil society over the 
implementation of e-governance in the Korea. He analyses that there is a gape 
between technical standards and social standards in the society. The technical 
standards focus on efficiency and social standards demands e-privacy, is a cause of 
conflict. In the end it draws some implication for e-governance and democracy.

\textbf{Das (2007)}\textsuperscript{81} defines that Information Technology (IT) enabling high quality, cost 
effective services, and provide skilled manpower, quality infrastructure. According to 
study India is shining in (IT) and hoped that it would provide employment to 1.1 
million people by 2010. Author says the poor states have not been able to take the 
advantages of ‘digital economy’ and the situation of digital divides occurs among 
different states. Author argues that rethinks and makes new strategies to face these 
challenges, in addition author give some suggestions for growth and development.

\textbf{Gupta (2007)}\textsuperscript{82} says that e-governance is a useful tool to increase the efficiency, 
improve public service delivery and bridging geographical divide. Author has 
highlighted the challenges such as lack of citizen-centric approach in identifying 
citizens, portal design, process design, IT system architecture and lack of responsive 
work culture which is affecting the performance of e-governance in the service 
delivery. He suggest that achieving optimal benefits of e-governance, a citizen-centric 
approach is required that will enable the government to achieve efficiency, 
responsiveness, raise citizen satisfaction and enhance quality of life.

\textsuperscript{79}Anni Dugdale, Anne Daly, Franco Papandrea and Maria Maley (2005), “Accessing E-Government: 
LXXI, No. 1, March, pp. 109-117.

\textsuperscript{80}Whasun Jho (2005), “Challenges for E-Governance: Protests from Civil Society on the Protection of 
Privacy in E-Government in Korea”, \textit{International Review of Administration Sciences}, Vol. VII, No. 1, 
March, pp. 151-163.

\textsuperscript{81}Diganta Kumar Das (2005), “Information and Communication Technology (ICT) and India’s 

\textsuperscript{82}D.N. Gupta (2007), “Citizen-Centric Approach to E-Governance”, \textit{www.iceg.net}
Bhatnagar (2009)\textsuperscript{83} author emphasises that e-governance cannot be a panacea for social ills like poverty and corruption, but he places enormous faith in its ability to act as a catalyst and as one of the drivers of development. Although most e-government schemes have an urban focus, he asserts that the political and social commitment to rural development can be accommodated in them. Services provided at the villager’s doorstep via the e-governance route can presumably cut out the inherent social biases. A computer generating the printout of a peasant cannot possibly deny services on account of social prejudices or in expectation of a bribe. However, the author notes that not all such rural e-government schemes have been successful. Schemes successful in some states in India have failed in other and he attributes the failures to a host of factors such as the absence of standards and infrastructure, lack of local language interfaces, the resistance of civil servants to change, the absence of a political will to reforms and the institutional incapacity to absorb change. But, beyond such factors, people with a shared background are still needed to operationalise e-government system designed to replace inefficient manual systems and there might be no social imperative for the technological change, both cause ultimately resulting in similar effects.

Wadhwa (2009)\textsuperscript{84} author has described the importance of e-governance. He says that there are 350 universities in India but only few have implemented the e-governance initiatives. He defines the reason that employees of universities are not familiar with computer, most of the staff is depended upon their computer literate employees. Author argues that employees should be trained in a right conduct and computer training should be provided. In concluding remarks he says that this step will make possible to have e-governance in universities, which is need of the time.

Alam (2012)\textsuperscript{85} highlighted the importance of e-governance. Further they said that the government of Bangladesh took various initiatives to implement e-governance in the year 2001. Study portraits that the implementation of e-governance in Bangladesh is not up to the mark and the government has not been getting the benefits of e-

Governance. Author has also analysis the factors which are responsible of this failure and gave some possible suggestions to overcome those problems.

Hamiduzzaman (2012)\(^8^6\) opines that e-governance application should be utilized in the management of education system for the overall development of education in the country. Introduction of e-governance can make the education sector efficient, faster and easier. Further study highlighted the e-governance challenges which make the system ineffective due to psychological inferiority; lack of training facilities, insufficient ICT infrastructure, lack of finance; technological maintenance etc. In conclusive statement the author’s points out that, to make the education sector efficient and effective the government must take immediate step to apply e-Governance in education sector for the betterment of the country.

Sharma, Bao and Qian (2012)\(^8^7\) have highlighted that e-governance is a tool to improve the government activities and it is necessary for the developing countries to adopt it. Study found that e-governance provides opportunities to deliver various services more effectively to citizens but in developing countries, e-governance initiatives provide services that have been unreachable to the people. It is because of low level of adoption of e-government services in developing countries. Authors have found the key reason behind that the citizens lack of knowledge about the new e-governance services. Further study has made some suggestions that government should develop new strategies and leadership for e-governance; public awareness programs on ICT should be organized and developed. As well as human resource, ICT infrastructure and fund must be improved for the better implementation of e-governance.

Verma, Kumari, Arteimi, Deiri and Kumar (2012)\(^8^8\) authors have defined that importance of ICT in the present time. They said ICT is loot to make the government more open and transparent on the other hand it can empower the citizen in terms of


watching their government. In addition they said that the successful implementation of ICT can be beneficial for making the government as well as citizens. Further study has highlighted that along with these all opportunities new challenges raised. Author have prepared the SWOT analysis of e-governance for Libya government and suggested some measure to meet with challenges.

Dhindsa, Narang and Choudhary (2013)\textsuperscript{89} state that e-governance is source through which citizens access government services and information by electronics means. They further define one of the important dimensions of e-Governance i.e. e-Portal. The e-portal specially used to design webpage at website to bring all the information together. Further they highlighted the benefits of e-governance portal i.e. it allows sending ‘mails’ between different official departments; it is also used by citizens to send messages to one another as well as to government servants and it also provides free resource for citizens to quickly identify the various government initiatives. In conclusion they said e-portal can be helpful in maintaining relations between government to citizen, government to business and government to governments.

Mittal and Kaur (2013)\textsuperscript{90} said that government of Punjab has initiated various e-governance projects in the state for providing public services. Further authors discussed that state has been facing a problem of digital gap. Study defined that rural area projects are suffering for poor implementation as compare to urban area. In the end authors also highlights various loophole in the implementation process of e-governance.

Yadav and Tiwari (2014)\textsuperscript{91} depicts that usefulness of on line service delivery by the e-governance has been accepted by the public and private sector. It was noticed that e-governance projects has been providing efficient delivery of services at the door step; increasing transparency; reducing corruption and it is very convenient to people. Authors have also described various ongoing e-governance projects in India. On the other side study highlighted the challenges faced by the e-governance implementation

in India i.e. low literacy; lack of awareness, low broadband penetration etc. Authors have suggested that government should take initiatives to overcome from these challenges.

1.7 SUMMING UP THE REVIEW OF LITERATURE

The major works classified according to the themes and the level of analysis by different authors, have been presented in the Table 2 below:

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<tr>
<th>Theme</th>
<th>List of analysis</th>
<th>Author/publication</th>
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<tr>
<td>Citizen’s Satisfaction</td>
<td>The study shows that emergence of e-governance is beneficial for citizens, it provide transparent, speedy, easy, low cost and less time-consuming public services at single window to the citizen. It has improved the citizen’s satisfaction.</td>
<td>Dey (2000); Rattan (2001); Pamela and McGuirk (2003); Adams (2004); Aneja (2005); Asgarkhani (2005); Kumar and Singh (2006); Monga, Mehta and Singh (2006); Palvia and Sharma (2007); Anna and Bretschneider (2007); Sangita and Bikash (2007); Singh (2007); Pathak, Naz, Singh and Smith (2010); P.M. Shankargouda (2010); Gilmore and D’Souza (2006); Singh (2012); Patel, Patел and Biju (2013); Pathak and Kaur (2014).</td>
</tr>
<tr>
<td>Improvement in Administration</td>
<td>The study reveals that consistent Improvement of administration is possible only with the e-governance; studies highlighted the role of e-governance to achieve the goals of “Good governance” for better administration. E-governance has improved the transparency, accountability and efficiency of administration with the use of information and communication technology (ICT) and it has changed</td>
<td>Mukhapadhyay (2000); Sudan (2000); Kalsi (2002); Sharma (2002); Sachdeva (2003); Alka and Uma (2004); Awdish, D.P and Rajendra (2004); Meenakshi and Gautam (2004); Naidoo (2004); Saxena (2004); Lan and Ray (2005); Brewer, Neubauer and Geiselhart (2006); Cook and Horobin (2006); Sharma (2006); Gessi, Rammarine and Wilkins (2007); Mishra (2007); Monga</td>
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<tr>
<td>Theme</td>
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<td>the structure and nature of organizations.</td>
<td>and Malhotra (2007); Nair (2007); Sodhi (2007); Filho (2009); P. Muralidhran (2010); Sanjeev Kumar (2010); Singla and Aggarwal (2011); Mistry and Jalal (2012); Singla and Aggarwal (2012); Uddin (2012); Vig (2012); Bharti and Dwivedi (2013); Malik, Dhillon and Verma (2014).</td>
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<td>Citizen’s Participation</td>
<td>The study has been found that e-governance has enhanced the citizen’s participation in the government, people taking part in policymaking, decision making and in development process. It broadens the area relationship between government and citizen (C2G).</td>
<td>Pardhansaradhi (2004); Srinivas and Vinita (2004); Conraoy and Cowley (2006); Tolbert and Mossberger (2006); Rao and Bikshapathi (2007); Milakovich (2010); Mittal and Kaur (2013); Haider, Shuwen and Hyder (2014).</td>
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<tr>
<td>Hurdles in E-governance</td>
<td>Studies consider digital divides, as a barrier to the successful rollout of e-governance initiatives, less focus on rural areas, shortage of funds, demand of e-privacy and less educated society are the hurdles in the way of implementation of e-governance.</td>
<td>Rajan (2003); Dugdale, Daly, Papandrea and Maley (2005); Whasun (2005); Das (2007); Gupta (2007); Bhatnagar (2009); Wadhwa (2009); Alam (2012); Hamiduzzaman (2012); Sharma, Bao and Qian (2012); Verma, Kumari, Arteimi, Deiri and Kumar (2012); Dhindsa, Narang and Choudhary (2013); Mittal and Kaur (2013); Yadav and Tiwari (2014).</td>
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1.8 INFERENCES DRAWN FROM THE REVIEW OF LITERATURE

The review of literature has brought about the role of E-governance in the fields of services provided, improvement of administration and improving people’s
participation. Studies suggested that there is need for effective implementation of e-governance initiatives all over the India.

**Inferences about Citizen’s Satisfaction**

The major inference about citizen’s satisfaction drawn from the review of literature is that, the introduction of e-governance has changed the traditional pattern of public service delivery. Now e-governance is providing speedy, quick, low cost, single window and transparent services to the citizens. It has improved the satisfaction among the citizens.

**Inferences about Improvement of Administration**

The major inference about Improvement of Administration drawn from the review of literature is that emergence of e-governance has changed the structure and nature of work of the administrative organizations and is helping in achieving the goals of good-governance and making the government more transparent, accountable and efficient.

**Inferences about Citizen’s Participation**

The important inference about People Participation drawn from the review of literature is that e-governance has put special emphasis on improvement of people participation in government. It offers opportunities to the people for direct participation in political government discussion; citizens can contribute their own ideas and share their knowledge and information.

**Inferences about hurdles in E-governance**

The studies put special emphasis on challenges in front of government in the implementation of e-governance at a large scale in India. Lack of telecommunication, network infrastructure and limited PC access, lack of financial resources, lack of ICT literacy and cultural resistance, high cost of business investment are major hurdles, which have been pointed out in the literature on the way of e-governance in India.

**1.9 OBJECTIVES OF THE STUDY**

The Objectives of the Study are as follows:

- To study growth and development of Information Technology (IT) in India.
• To examine Policy and Administration of e-governance in the State of Haryana.
• To check the level of e-readiness of different Departments in Haryana.
• To study e-governance initiatives in the state of Haryana.
• To examine the level of satisfaction of citizens towards e-governance initiatives in Haryana.
• To suggest measures to improve the e-governance Policy and administration in Haryana.

1.10 HYPOTHESES OF THE STUDY

Hypotheses of the Study are as follows:

• Most of the Departments in the State of Haryana are not ready for e-governance.
• Government of Haryana has failed to provide sufficient infrastructure for e-governance in Haryana.
• The human resource of the department’s of Government of Haryana lack computer skills.
• Non-availability of resources has been a big hurdle in the process of computerization in the departments of Haryana.
• Government has made no effort to simplify its rules, regulations and internal processes.
• E-governance has resulted in saving of time in delivery of services to the citizens.
• E-Governance has brought transparency in Government Departments of Haryana.
• Citizens are satisfied with the quality of services after introduction of e-governance initiatives in Haryana.
1.11 SCOPE AND LOCALE OF THE STUDY

The study proposes to examine the Policy and various initiatives of E-governance in Haryana. In addition, efforts would be made to check the level of e-readiness in Government Departments of Haryana. The study would also focus on whether the E-governance initiative adopted during the last few years has improved the satisfaction of citizens and made the government system more transparent, responsive, accountable and corruption free. The location would be departments of government of Haryana situated at Chandigarh. Further, to study the satisfaction of citizens towards e-governance initiatives, Common Services Centres (CCC) would be visited in the state.

1.12 RESEARCH METHODOLOGY

The study depended upon both primary and secondary data. Secondary data was collected from secondary sources such as official documents of Government of Haryana, various reports by commissions and committees submitted from time to time, statistical abstract of Haryana, books, journals, and published proceedings of conferences, online journals of e-governance and websites of government at the union as well as state levels and various national and international agencies having interest on e-governance.

The primary data was required for checking e-readiness of various government departments in the state of Haryana and the level of satisfaction of citizens towards the services being provided through Common Services Centers. In order to check the e-readiness of various departments e-readiness composite index comprising of (a) Physical Infrastructure (b) Human Resources (c) Government re-engineering (d) Departmental Computerization (e) Government Policy, used by Government of India was employed. Senior officials and employees of select departments of government of Haryana were interviewed for this purpose and relevant information was gathered. For examining the level of satisfaction of citizens towards the services being providing by Common Services Centers (CSC) in Haryana multi-stage random sampling method was used. As the Common Services Centers (CSC) are spread throughout the state of Haryana and are established in both rural as well as urban areas, efforts were made to
draw a representative sample from these areas. The Government has divided the area in the state into four divisions for the purpose of establishment of CSC in Haryana. Out of these four divisions, two divisions were selected and further from each division two districts were selected randomly. From each district a sample of 75 citizens from CSC were contacted. The data thus collected were processed and analyzed. The data processing involved editing, coding, classification and tabulation. The data was analyzed by applying chi-square test.

1.13 CHAPTER SCHEME

The Chapter Scheme of the research study is as follows:

1. Introduction.
2. E-Governance in India.
4. E-readiness of selected Government Departments in Haryana.
5. Citizen’s Perception towards the Policy of e-governance and its implementation in Haryana.
6. Summary and suggestions.