

CHAPTER 1: INTRODUCTION

1.1 Background

Information Technology was introduced by then Nepal Government in 1971 to process the National population census data. National Computer Center was established in 1974 with the objective of providing IT training within Nepal. NCC, developed software for number of government agencies, processed examination results for SLC Board and Tribhuvan University. It also conducted regular training courses on Computer Literacy and software applications. NCC was dissolved in 1998. The National Information Technology Center (NITC) was established in the year 2002 in line with IT Policy 2000 under the then Ministry of Science and Technology (MOST). NITC has the main objective to build knowledge based society by supporting knowledge based institutions and industries as well as promote and develop Information Technology (IT) by making it accessible to the general public.

The Infrastructure and Access, a key element of the master plan is in poor state in the country. In Nepal, less the 1% of the population is using Internet and less than 10% people are connected to fix or wireless telephone network. One of the main reasons behind it is due to lack of adequate communication and electricity in the country. The transmission networks which include backbone link, microwave radio network, optical fiber network also have issues such as low quality and availability, frequent trouble in link, low capacity of links. With the present infrastructure, it is difficult to move ahead the plan. (Adhikari, 2007)

Nepal government has developed e-government master plan in 2006 with help Korean Government that comprises practical vision for national e-governance, appropriate architecture; create infrastructure, e-government framework, policies, standards and procedures for e-governance and decision making. (NITC - eGovernment, 2008)

Information and communication technology (ICT) have fundamental impact and huge influence on the human civilization. ICT is changing the economy, society and culture in

increasingly persistent and complex ways. The dramatic advancement of the ICT in the recent years has provided all sections of a society with enormous prospective benefits in almost all the fields. This development of ICT even led to advent of e-governance which is now one of the most discussed topics all around the world. Since the capabilities of ICTs for the public sector became evident to governments around the globe, initiatives to offer online public sector products and services have increased. The result is that e-government has become widely adopted and utilized in countries around the globe (Tian and Tianfield, 2003).

Governments (local, regional, national or even supranational) have been slower to clamber onto the web-enabled bandwagon. Governments are traditionally more conservative entities, slower to change, and slower to adopt new initiatives, than operators in the commercial field (cf. Marche and McNiven, 2003). But public servants now speak about stakeholders customers and clients of government agencies and about performance indicators, business plan and vision statements (Tupper,2001)

1.2 E-government Introduction

The information technology application used by the government for public service delivery is know as e-government. In other word, “E-Government is the delivery of information and services online through the internet or other digital means” (West, 2002).

E-Governance is about the use of ICT in the public sector with the aspiration to improve the quality of its services to the citizens. It encourages the active citizen participation in the decision-making process and reinforces the relation between the public officials and communities; leading to more accountable, effective, inclusive and transparent government. In other words, e-governance is the process of using ICT for automation of both internal activities or operations of the government and its external interactions with citizens and other governmental agencies. Automation of internal activities of the government reduces the cost as well as improves their response time. External automation like interaction with citizens and other governmental agencies reduces the overhead thus creating the value of economy. The main objective of e-governance is to engage, empower and enable the

citizens to build their capacities. Good governance is generally characterized by participation, accountability and transparency to manage affairs of country at all levels. It provides the opportunities to transform the bond between the government and citizens in a new way. The use of ICT in the public sectors can enhance the government's capacity to provide better services to citizens in terms of time and to make the governance more effective, more efficient and more transparent. In addition, the transaction cost can be lowered and the government services and information are more accessible

E-government master plan, 2006, has defined the meaning and definition in more clear form to help understand the e-government and its trend, definitions of e-government by world-renowned institutions has prepared as following.

Figure 1.1: E-Government Definition 1

Item	Traditional government	e-Government
Customer service expectation	<ul style="list-style-type: none"> ○ Government driven ○ Cumbersome, many channels ○ Get in, get out 	<ul style="list-style-type: none"> ○ Customer driven ○ Option for end-to-end self service ○ Enduring relationship
Staff	<ul style="list-style-type: none"> ○ Overworked or underutilized ○ Distance customer contact 	<ul style="list-style-type: none"> ○ Optimized effort-to-value ratio ○ Immediate customer service
Technology	<ul style="list-style-type: none"> ○ Silo-serving ○ Information center 	<ul style="list-style-type: none"> ○ Enterprise serving ○ Intelligent reporter
Organizational structure	<ul style="list-style-type: none"> ○ Process based ○ Territorial ○ Outsource to meet today's need 	<ul style="list-style-type: none"> ○ Competency based ○ Shared services ○ Partner for current and future value.

National information Technology Center of Nepal (NITC) has defined the scope of e-government a radical concept that covers wide range of IT enabled reforms. They are as follows.

-) Prioritize the governments need to use IT and the Internet to provide services between government agencies, citizens, and business.
-) Improve the democratic values of the government process and administrations through more transparency, accountability, and involvement.
-) Make the internal operation of public administrations more efficient.

-) Change the mindset of the administration for successful implementation of e-governance.
-) Create awareness of IT in the top bureaucracy.
-) Expand access of IT to the common people through establishment of self sustaining Tele-center in rural part of the country.

As e-government develops, agencies are able to conduct transactions with the public along web-enabled systems that use portals to link common applications and protect privacy. Offering more services online will ease the navigation between agency boundaries, permitting smoother paths of communication between citizens and their government. (Themistocleous & D.Sarikas, 2005). E-Government is about the civic institutions and foundation of out next generation communities (Burn & Robins, 2003). E-government is not just putting firms and services online. It provides the opportunities to rethink, how the government provides services and how it links them in a way that is tailored to user's need. (Burn & Robins, 2003)

Nepal government has initiated to implement the e-government in various public organizations. It has circulated to establish a MIS unit in each organization. It has made mandatory for every ministry to have a website. Further, telephone services have reached in all the districts of the nation. Mobile services have been rapidly expanded into all the parts of the country. Internet service reach into each village is in priority of government. In this contest e-government infrastructure is becoming better.

Nepal is facing numerous challenges while introducing and implementing e-government programs such as political issues, inadequate human resources, lack of necessary legal framework, little public awareness about ICT, poor ICT infrastructure across the nation, to name a few Due to lack of integrated planning, ICT resources in the government offices are not fully utilized. Most of the government officials have a mindset that they will lose their jobs if ICT is introduced in their working environment. As a result, they are resistant to the proposed changes. (Adhikari, 2007).

1.3 Rationale of study

Although e-government is granted as an effective tool for good governance and service delivery, it has not been properly developed. Electronic Government (e-government) has much untapped potential to improve productivity and the quality of life as well as being the trigger of change for the transformation of the public sector by radically shrinking communications and information costs, maximizing speed, broadening reach and eradicating distance. (Kesson, Skalen, & Edvardsson, 2008). However in our cases, several attempts have been made to penetrate use of this tool for better service delivery and change in the way the public sectors functions. From the literatures review it has could be found that, no previous research have been seen in this field that are focused to evaluate the effectiveness of e-government in the public sector organizations. The literature review show that largely positive predictions regarding the potential benefits of e-government from a conceptual perspective have not been supported by empirical research. Same research finding could be expected in case of Nepalese public sector organizations. Research in this field can help conceptualize, evaluate current e-government initiatives and effectiveness from which both academicians and practitioners can have benefits.

Private companies have continued to take advantage of ICT to improve their businesses, whereas the services offered by government organizations have remained deficient over the years. Bureaucracy and the low rate of change in the public domain have caused much criticism of government services and the resulting outcomes in terms of government and citizen relationships. This has often led to low public participation and trust in government services. Public organizations have realized the limitations of their legacy ICT infrastructures and are seeking ways to improve their efficiency and provide better service to citizens. (Themistocleous & D.Sarikas, 2005). Web has potential to increase dramatically the government level of quality services by making the present paper-driven or counter based services more convenient and accessible to the citizens and business (Burn & Robins, 2003). Most of the structured management functions in developed countries are offered online through web. Such an example can be seen on the Canadian e-government site, <http://cic.gc.ca> where all the immigration related information and services are available. In maximum cases we can simply use online services to perform our works. Assessment of the

role of information technology in public service quality would be an important research (Maria A kesson, 2008).

Regarding these developments Nepal has also made efforts to implement e-governments but successful change management could not be realized in the Nepalese public organizations regarding the level of out puts in the Public government web sites. In this context, study and evaluation of already initiated e-government activities and its effectiveness has very good significance which can reveal important information regarding the progress, barriers and perspective in the Nepalese e-Government initiatives.

Nepal governments have launched several programs and program on e-government have been developed and implemented, however effectiveness of the same have never been assessed. In this context it is significance to study the e-government initiatives of Nepalese public organizations and their effectiveness. This study will help to understand the existing situation of e-government initiatives for scholars and government of Nepal and donor agencies as well.

Nepal government has made all the ministries and government departments mandatory to have website and deliver basic information through the web sites to citizens. Websites have been developed and put in operation by most of the ministries and departments. However, effectiveness of the e-Government initiatives have not been assessed and measured. Quality is decreasing compared to previous years as per the published literatures. This is supported by the survey made by the by Darrell M. West, in Global E-Government, E-Government Country Rankings, 2007 where Nepal has fallen down to 108th position from its 60th position in the year 2006 whereas the neighboring countries India has raised from its 77 to 47th position and China from 76 to 51th position. This indicates that there are no sustainable e-government initiatives.

In a research on e-government (West, 2007), it has stated that ‘there are a number of technical problems in accessing government websites around the world. Some government pages such as Nepal’s Ministry of Industry and Commerce and Morocco’s Directorate of Statistics no longer exist but remain on the site. (West, 2007). Such statements in the research papers indicate that our public sector websites are well accessed by the researcher and perceiving problems on it.

While most of the e-government initiatives are currently focused on providing information and basic public services, the authors believe that the success of e-government will largely depend on providing value added service to citizens but whether the public organizations are culturally, strategically or infrastructural ready to adopt the change is not empirically studied by the Nepalese scholars before however several conceptual papers are published from time to time. The most prevalent category that research emphasizes is access to information; whilst citizen participation is the most controversial and least investigated form (Tian and Tianfield, 2003).

Change management environment, change management practices and evaluation and monitoring of the program are important ingredients of success of any change management practices and this is in case of e-government as well. Guha's Change Management Model, was used to evaluate the effectiveness of the e-government initiatives. This model was also tested at an Online Strategy Project in Western Australia as researched by Burns and Robbins in 2003 and found to be successful in the change management. It was also recommended as a reference model. The same model was found to be rational to evaluate the e-government management initiatives and effectiveness of Nepalese public sector.

The local governments in Nepal, particularly the municipalities are considered to be the prime public organizations entitled to provide the e- services to their citizens. Further lot of funding has been received by the local government organizations like UNDP, DFID etc. One of the projects involved in development and implementation of e-government services in the municipal organization is Rural Urban Partnership Project (RUPP). This project developed and implemented first pilot e-government project in Nepal. Similarly other municipalities have developed and implemented the e-government programs which are primarily services delivered through the municipal web-sites. Assessment of the quality of the websites is important at this moment evaluate the quality of websites for the e-government services, as such the highly significant to have this study.

1.4 Objectives

Objective of this research is assessment of e-government movement of local government through

1. Evaluation of e-government websites of municipal organizations in Nepal.
2. Based on the available e-government quality indicators.

1.5 Theoretical framework

The first step toward delivering high quality citizen service is to realize that the nature of citizen needs is different depending upon their primary relationship to government. Three such government service relationships provided – government-to-citizen (G2C), government-to-business (G2B), and government-to-government (G2G) – have been identified in the literature. (Soliman, 2006)

E-government applications have been categorized into three categories: access to information, transaction services and citizen participation (Marchioni et al., 2003). The most prevalent category that research emphasizes is access to information; whilst citizen participation is the most controversial and least investigated form (Tian and Tianfield, 2003). Websites are evaluated for the presence of various features dealing with information availability, service delivery, and public access. Quality of website assessed are assessed on the following features: online publications, online database, audio clips, video clips, non-native languages or foreign language translation, commercial advertising, premium fees, user payments, disability access, privacy policy, security features, presence of online services, number of different services, digital signatures, credit card payments, email address, comment form, automatic email updates, website personalization, personal digital assistant (PDA) access, and an English version of the website. (West, 2007)

Challenges include business process re-design, ongoing funding stream, intergovernmental cooperation, and performance and accountability programs. These challenges stress that reaching the phase that requires a major cultural leap in business practices, organizational structures, and governance processes. (Burn & Robins, 2003)

E-government is no just putting firms and services online. It provides the opportunities to rethink, how the government provides services and how it links them in a way that is tailored

to user's need. (Burn & Robins, 2003). Specific barriers associated with the e-government initialization process are many, including issues of citizen privacy and security, inadequately skilled citizens and government employees, and the tendency for e-government to replicate traditional government, i.e. perpetuating the functional insularity (Marche and McNiven, 2003). Finally there is the issue of access: the digital divide between the haves and have-nots in society is still a huge one, and sadly many of the people who might stand to gain most from e-government are the least connected, least educated, and least aware of how to do so (Accenture, 2001)

Foley and Alfonso (2002) conclude that the so-called digital divide is the largest barrier to successful e-government. Therefore, key to the success of e-government strategy that will overcome the digital divide will be a network of open communication, together with a combination of sharing and listening that will flow both horizontally and vertically throughout government organizations.

E-Service Quality is the extent to which website facilitates efficient and effective shopping, purchasing and delivery of products and services (Parasuraman, 2002). His initial research in the area indicated that there were 11 dimensions of e-service quality: (1) Access; (2) Ease of navigation; (3) Efficiency (4) Customization/personalization; (5) Security/privacy; (6) Responsiveness; (7) Assurance/trust; (8) Price knowledge; (9) Site aesthetics; (10) Reliability; and (11) Flexibility. (Buckley, 2003)

Based on a sample of 540 Internet users he concluded that there were four key dimensions:

(1) Efficiency; (2) Fulfillment; (3) Reliability (4) and privacy. (Buckley, 2003)

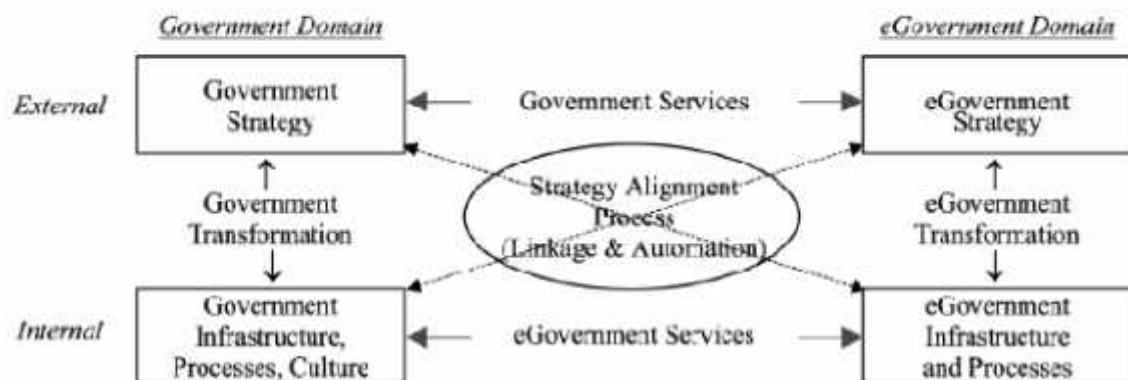
The quality and extent of their e-government services are part of the competitive environment. The same level of quality may be highly appreciable in one environment whereas very less appreciated in another environment.

Robert M. Davison, 2005) Nevertheless, e-government services should be designed so as to help citizens get in, find their information or transact their business, and then get out as efficiently as possible. It is useful here to refer to "stickiness". In an e-business context, "stickiness" suggests keeping a customer on a web site as long as possible, in the hope that the customer will buy something. In consequence, web sites are often designed to be maximally sticky. In contrast, few e-government web sites need such levels of adhesiveness! In most cases, it is more appropriate that the citizen can easily access the service, complete a transaction, and get out. This suggests that optimal stickiness rather than maximal stickiness is desirable. (Robert M. Davison, 2005)

1.6 E-government alignment model

An integrated model of strategic transformation that combines the insights of both the maturity and the strategic alignment models have been suggested to explain the progression from government to e-government more precisely.

Figure 1.2: E-government alignment model



Source: Henderson and Venkatraman (1993)

Adopted from: (Robert M. Davison, 2005)

Strategic fit in government is the alignment between external and internal domains that is represented by either government transformation or e-government transformation. While strategic integration in government is the link between the external components, i.e. Government strategy and e-government strategy domains, operational integration are the link between the internal components (i.e. government infrastructure and processes and e-government infrastructure and processes).

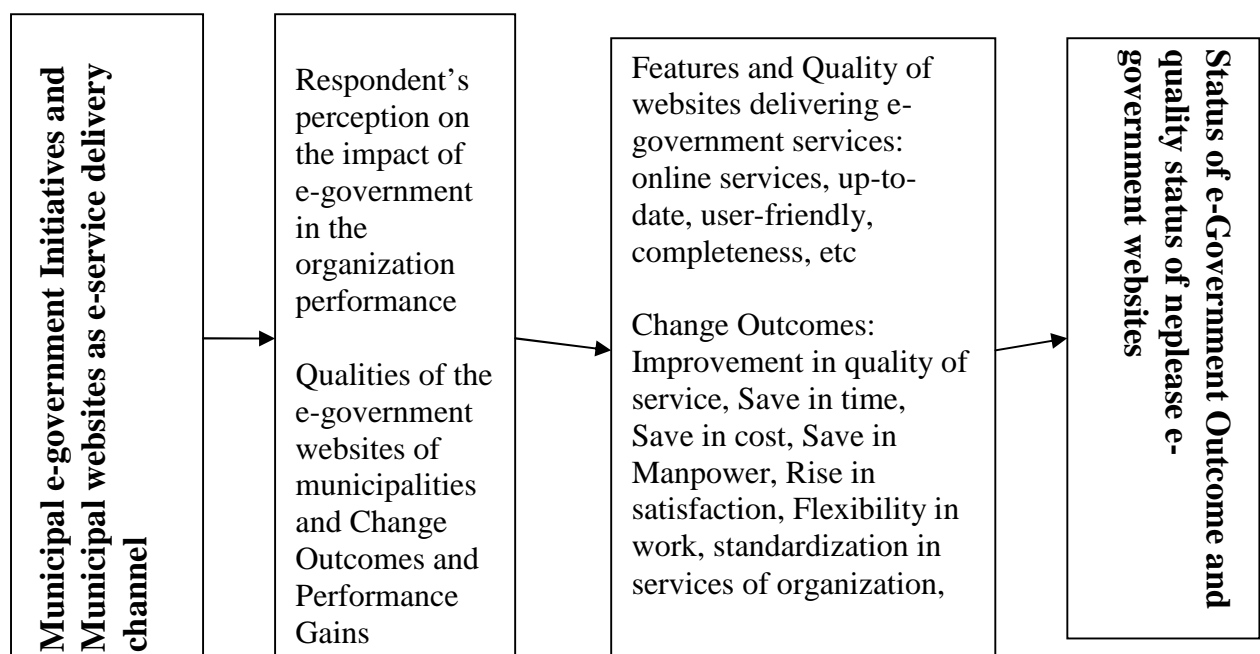
The model helps to answer why a government is, where it is and how it may progress further, but with predictions that differ from those offered by more simplistic models. The model is designed to be both descriptive and indicative. It can be used as a diagnostic tool to establish the current e-government position of a country or jurisdiction. It can also be used, at a macro level, as a guide to future e-government developments.

1.7 Research model

This research model is based on Guha's change management model. In this model every organizations takes some initiatives to implement e-government system in organization which undergo thorough the several organizations environments and cultures. As such for successful change management practices and effectiveness in the implementation, needs favourable change environment , change management practices and see the e-government change outcomes and performance gains.

Hence in this research model, various variable identified under the e-government change environments are Information flow, Management support, Risk Taking Propensity, Focus in quality, Open data sharing culture, Leadership quality, Clear organizational vision, Clear e-government vision, leadership Quality, Proactive Management, Informed decision making practice, Adoptability in new technical environment, Quick learning,

Figure 1.3: Research model



Additionally evaluation of the performance gains and outcomes is examined with set of variables as Improvement in quality of service, Save in time, Save in cost, Save in

Manpower, Rise in satisfaction, Flexibility in work, standardization in services of organization, Quality of websites delivering e-government services (online services, up-to-date, user-friendly, completeness etc)

Websites are evaluated for the presence of various features dealing with information availability, service delivery, and public access. Quality of website are assessed on the following features: online publications, online database, audio clips, video clips, non-native languages or foreign language translation, commercial advertising, premium fees, user payments, disability access, privacy policy, security features, presence of online services, number of different services, digital signatures, credit card payments, email address, comment form, automatic email updates, website personalization, personal digital assistant (PDA) access, and an English version of the website. (West, 2007)

Challenges include business process re-design, ongoing funding stream, intergovernmental cooperation, and performance and accountability programs. These challenges stress that reaching the phase that requires a major cultural leap in business practices, organizational structures, and governance processes. (Burn & Robins, 2003)

1.8 Limitations of research

There are several limitations observed in this research.

-) The model which has been used here in this study was tested to be successful in Australian business environment and recommended as a change management practices; however this may or may not be valid in case of to give Nepalese business environment. *Heeks, 2002*, has expressed in his research that developing countries getting trapped in spending resources to push major reforms like e-government on the basis of models, which may not work in contexts that are significantly different from the advanced one. The risks could be of more cynicism and disillusion, and investments in ICT could turn into some form of growth-reducing rent. This statement supports the the limitation stated at this point.
-) The study has been limited to only two types of public sector organizations i.e. ministries and municipalities. Other government and semi-government organizations may have offering better e-government services which are not considered within the study area of this research work.

-) Status of the e-government initiatives of Nepalese public organizations, particularly in the selected area of study was found in very primitive stages due to which it may not be appropriate time to evaluate the initiatives of the e-government initiatives
-) Intervening variables like income level, geographic locations, education level of the community have not been taken into considerations which may have significant impact in effectiveness of the e-government initiatives, have not been considered
-) The respondents of this research are from the Nepalese socio-business environment. Some of the technical questions for which some e-government knowledge is required, but considerable number of the respondents may not be well aware of the functions and scope of e-government, which may have impacted on the quality of response hence the research.
-) The study has been made based on the perception of the respondents. The perception may be contextual and may be changed over time with the socio-technical and business environment
-) The respondents are selected primarily from officer or senior officer levels and mostly from the MIS/IT departments. So there may be a kind of biasness to show their success and hide their weakness since they are responsible entities for implementations.
-) The study was made from July, 2008 to November, 2008 period. Information technology is fast changing and implementations are going on aggressively in public organizations. So the finding before and after this period may not be same as found in this study.

1.9 Organization of study

The study is organized in five chapters namely introduction, review of literatures, research methodology, analysis and presentation of data and lastly conclusion and recommendations.

The first chapter describes the general introduction of the research proposed and the context in which the research is being conducted. The first chapter contains the background of the study, significant of the study, statement of the problems, and objective of the study, theoretical framework and limitation of the study.

Second chapter is review of literature chapter which is focused to review the theoretical framework of the e-governance and related research studies. It contains the major finding of the literatures reviewed which are relevant to this research study. The research papers and the literatures have been used to identify the variables of the research and to know similar and other important literatures and research made on the e-governance. Mainly this chapter contains the theoretical concepts of the e-governance services and some models of e-governance change management.

Third chapter is the description of the research methodologies used in this study. This chapter contains the research design, sampling procedure of the primary data, data collection techniques used, the variables and the scale of measurement are included in this chapter. Additionally the data analysis tools and techniques used have been described in this chapter.

Fourth chapter is on analysis and presentation of the data collected for this study. The data collected are analyzed using various SPSS and Excel and presented in this chapter. Various table of analysis, description of the output of the analysis of the variables of study to measure the effectiveness of the e-government initiatives are the contents of this chapter.

Fifth chapter contains conclusion and recommendations. Here the findings of the research study have been summarized and concluded with recommendations for further research and issues of e-government implementation in Nepalese public organizations.

CHAPTER 2: REVIEW OF LITERATURE

2.1 Background

The European Union (Commission of the European Communities, 2003) has defined “e-government” as the use of information and communication technologies (ICTs) in public administrations combined with organizational change and new skills in order to improve public services and democratic processes and strengthen support to public policies.

Electronic governance has become a precondition for good and transparent administration with e-democracy backed by e-governance and e-business acting as the prime mover for economic growth. Good governance in public administration means provision of quality services to the citizens and stakeholders who have diverse interests. It also means administrative independence and managerial autonomy. (Sukla, 2005).

Throughout the world, governments and public-sector authorities are increasingly using information and communication technology (ICT) to provide services that are accessible to the public 24 hours a day, seven days a week. The term “e-government” has been introduced into practice and research to describe these developments. (Akesson, Skalen, & Edvardsson, 2008). Some scholars have argued that the emergence of e-government represents a paradigm shift in the organization of the public sector that will have a profound effect on public administration in terms of technology, cost-efficiency, risks, and benefits to the public (Ho, 2002; Reschenthaler and Thompson, 1996; Criado and Ramilo, 2003).

Since the development of the World Wide Web, considerable attention has been focused on the adaptation of web-based technologies to the business environment, notably in the business-to-business (B2B) and business-to-consumer (B2C) sectors. More recently, new sectors have been gaining attention, including those that involve government, such as government-to-business (G2B) and government-to-citizen (G2C).

It is perhaps not surprising that governments (whether, local, regional, national or even supranational) have been slower to clamber onto the web-enabled bandwagon: governments

are traditionally more conservative entities, slower to change, and slower to adopt new initiatives, than operators in the commercial field (cf. Marche and McNiven, 2003).

The stereotypical image of a Government is of a slow-moving bureaucracy, unwilling or unable to change and years behind other industry sectors in its use of new technology and new business models (Accenture, 2000a). In this model, citizens and businesses engage with government in many areas, creating vast amounts of paperwork – an inconvenient and confusing process. Stereotypes are by nature unspecific – there are always exceptions.

Studies of e-government are restricted to the web era, and indeed primarily to the last few years, there is a longer-standing literature on new public management (Bevir et al., 2003) and the reinvention of government that in many ways lays the groundwork for the e-government initiatives that were to follow. Osbourne and Gaebler (1992), for instance, proposed that citizens should be regarded and treated as customers, suggesting that the delivery of government services should be redesigned with a customer focus. This view is challenged by Mintzberg (1996), who usefully distinguishes customers from clients, citizens and subjects. He points out that you don't have to call someone a customer in order to treat them well or ensure that services are designed with them in mind. Customers buy products, clients buy services, but citizens have rights “that go far beyond those of customers or even clients” (Mintzberg, 1996, p. 77). Furthermore, citizens not only have rights, but also duties, as subjects: to pay taxes, to be drafted in armies and to respect laws (or suffer the consequences). To suggest that citizens are equivalent to and should be treated as customers not only grossly oversimplifies the nature of the relationship between government and citizen, but it perverts it (see also Ciborra, 2003). This does not mean that there is no need to reinvent government, but it does limit the extent to which the nomenclature of B2C relationships parallels that of G2C relationships. (Davison, Wagner, & Robert, 2005)

Development in the 21st century cannot be envisaged without the development and expansion of telecommunication technology; therefore, development, expansion and proper mobilization of this sector are vital for the overall development of the country. It is necessary to develop and expand this sector as a foundation for the enhancement of public awareness despite the country's difficult and remote terrains, weak economic status and structural system, for increased accessibility to new technology and inventions, to save time,

development of knowledge and skill, proper dissemination of information to general public on the development of science and technology, for ensuring information rights, as well as for getting merged into the mainstream of globalization. (Three Year Interim Plan, NPC, 2007)

2.2 Theoretical perspective on e-Governance

The following definitions come from a number of global sources, including the World Bank, United Nations, Global Business Dialogue on Electronic Commerce (GBDe) and OECD.

World Bank (www.worldbank.org): E-government refers to the use of information technologies by government agencies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other arms of government. These technologies can serve a variety of different ends: better delivery of government services to citizens, improved interactions with businesses and industries, citizen empowerment through access of information, or more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.

United Nations (www.unpan.org): _ E-government is defined as utilizing the Internet and the world-wide-web for delivering government information and services to citizens.

Global Business Dialogue on Electronic Commerce (GBDe) (www.dbde.org):_ Electronic government (hereafter e-government) refers to a situation in which administrative, legislative and judicial agencies (including both central and local governments) digitize their internal and external operations and utilize networked systems efficiently to realize better quality in the provision of public services.

According to Organization for Economic Co-operation and Development (OECD) (www.oecd.org) e-Government:

- _ is more about government than about “e”
- _ improves efficiency
- _ improves services
- _ helps achieve specific outcomes
- _ can contribute to broad policy objectives
- _ can be a major contributor to reform
- _ can help build trust between governments and citizens
- _ can open up the policy process
- _ challenges existing ways of working
- _ seamless government services will drive agencies closer together

Torres et al. (2005) define governance as the rules, processes and behaviors that affect the way public administrations function, that is, the organization and culture of public administration. Moon (2004) believed that governance itself is much more than the physical authoritative institutions, organizations and process within the public sector.

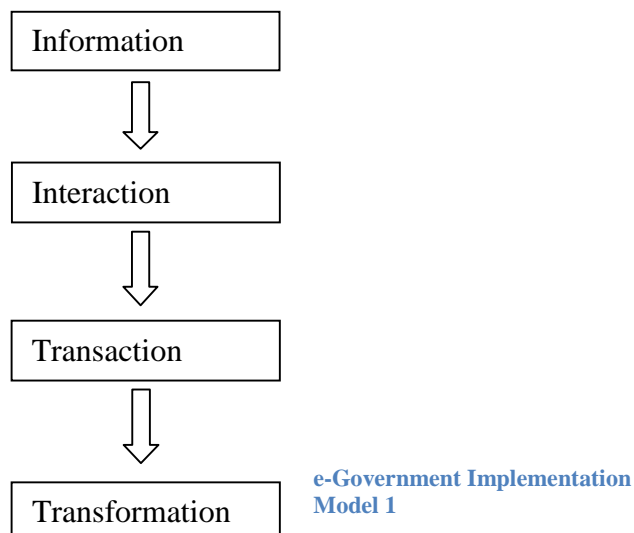
The effectiveness of systems of governance he argues is particularly important because if failure occurs, then government will ultimately be held accountable. Moon (2002) argued for a shift in the terms of reference for government, with the advent of new ideas, organizations and citizens now need to work in relationships and collaborative partnerships with government and there is a strong argument for the pursuit of reciprocal interests and shared values in order to be effective. There is also a strong argument that as governance now enters the twenty-first century, a stronger emphasis for the use of ICT technology should support collaborative relationships and network forms. Tan et al. (2005) believes that e-Governance should now be at the heart of national ICT strategies to make the development of e-Government sustainable. They state that the concept of e-Governance, is a much broader than e-Government, encompassing the wide-ranging challenges to corporate management brought about by technological advancements. The authors incorporate Pablo and Pan’s (2002), cited in Tan et al.(2005) concept of e-governance at four different levels:

- (1) Transforming the business of government.
- (2) Increasing participation, openness, transparency, and communication.
- (3) Transformation in the interactions between government and its internal and external clients, classified as government to-citizen (G2C), government-to-business (G2B),

government-to-internal-employee clients (G2E), government-to-other-government institutional clients (G2G), and citizen-to-citizen (C2C).

(4) Transformation of society through the emergence of e-societies, which comprise networks of relationships such as citizen-to citizen connections and relations between non-government organizations (NGOs).

Gartner, an international e-business research consultancy firm, has formulated a four-phase e-governance model. The system of e-governance will acquire maturity according to these four-phases. This model may serve as a reference for governments in the overall evolution of an e-governance strategy; however, it is not necessary for all the countries to pass through all these phases.



In this phase relevant government information will be available on the web, thus providing service to the public (G2C-government to citizen and G2B-government to private sector). These sites would convey the government's plan, information such as official addresses, working hours, forms and applications for public use, economic reviews, corporate regulations for businesses, and budgetary allocations and expenditures.

In a second phase, the government will interact with the public (G2C and G2B). People can ask questions via e-mail, use search engines for information, and download all sorts of forms and documents. Internally (G2G) government organizations use Local Area Networks (LAN), intranets and e-mail to communicate and exchange data.

This phase uses little complex technology and would signify direct interaction of the government and relevant entities such as online services, filing income taxes, payment of property taxes, extension/renewal of licenses, visa and passports, and online voting. Phase three is complex because of security and privacy issues - e.g., digital (electronic) signatures are necessary to enable legal transfer of services. On the business side the government can begin with e-procurement applications.

The final phase achieves the true vision of e-governance. Here all information systems are integrated and the public can get G2C and G2B services virtually at any counter. One single point of contact for all services is the ultimate goal.

2.3 E-Governance and stakeholder theory

eGovernance must not be considered merely as a vehicle for reducing public administrative overheads and implemented in a business like fashion (Grant, 2002). In terms of developing overall strategy, there is a fundamental responsibility to understand the needs of government, organizations and citizens from a stakeholder perspective. The idea of citizens and organizations interacting with government as stakeholders is not new by any means (Carroll, 1996; Freeman, 1984). Byrson (2004, p. 22) suggests that a stakeholder, regardless of their power is like any person, group, or organization that can place a claim on the organization's attention, resources, or output, or is affected by that output. According to Freeman et al. (2004) there are two key questions to be asked: What is the purpose of the organization? But to encourage participants to engage and create a joint and shared vision. What is the responsibility of management to stakeholders? But to include them in the management process. In this case, it should be asked what responsibilities do government and citizens have in the development of e-Governance? Freeman et al. (2004) infers that taking a stakeholder approach encourages social responsibility and collective action on the part of governance.

Stakeholder theory is a widely acknowledged argument for introducing more collective responsibility, especially in emergent network relationships (Freeman, 1984; Jones and Wicks, 1999; Tan et al., 2005). Typical stakeholders are identified as consumers, suppliers, government, competitors and shareholders (Carroll, 1996). The central tenet is that the interests of these parties are taken into account when arriving at management decisions, as

the very purpose of a firm is to serve and co-ordinate the interests of its various stakeholders (Buchholz and Rosenthal (2004). Freeman's desire for the stakeholder model to replace existing forms of institutionalize governance and empowering individuals is at the core of the value of stakeholder theory, though

questions must be asked in relation to public policy and governance, concerning issues of responsibility and accountability, for example, if there is collective decision making and empowerment then is there a need for partnership and collective social responsibility? Buchholz and Rosenthal (2004) address the issues of responsibility and accountability by suggesting a weariness of stakeholder theory, traditional forms of governance they argue offer a stable regime of accountability, something which stakeholder theory could erode through endless participation.

Matten and Crane (2005, p. 6) further add to the debate by exploring the concept of stakeholder democracy which has been on the fringes of the business ethics and CSR debate: "occasionally alluded to, but rarely if ever defined, dissected, or deliberated on." The basic proposition Matten and Crane argue is that "stakeholders participate in the processes of organizing, decision-making and governance". An interesting question therefore is where is ICT taking us in relation to stakeholder theory and e-Governance? Tan et al. (2005) cited numerous authors have believed that the core of e-Government strategy involves a fundamental realignment of development objectives with the needs of primary stakeholders (Pardo et al., 2000 (cited in Tan et al., 2005); Pardo and Scholl, 2002 (cited in Tan et al., 2005)). Tan et al. (2005) in their review of e--Government services in Singapore held the fundamental assertion that any analysis of eGovernance must start with the assumptions of stakeholder management including key aspects such as: identifying who stakeholders are; understanding stakeholder interests; working out how to align stakeholder interests for in an e-Government framework. Role of corporate social responsibility (CSR) Korner (2005) argues that new CSR research is investigating the importance for CSR for society at large and in particular, the role of public governance and policy to promote long-term competitiveness, suggesting that CSR can be viewed as a different form of corporate governance which in itself can link to form of public governance. Korner (2005) believes that governance from a CSR perspective signifies a changed perspective, one that tries intensively to take into account the views of all stakeholders for economic, as well as, social benefit. Windsor (2006) discussed the economics of corporate social responsibility and argues the rationale for public and citizen responsibilities for implementing CSR, most of the CSR literature the author argues is in terms of "principal to principal responsibilities" between two agents, however

that agency view of CSR is now being replaced with a more network view, where there a mutual benefit gains for all stakeholders in society (Freeman et al., 2004); Windsor (2006) highlighted that in a societal versus economic debate, the CSR principle is that society is the superior principal.

There is an urgent responsibility for government to involve stakeholders in driving e-Governance and ICT forward at national and international levels, for societal as well as economic benefits. Husted and Salazar (2006) make the case for the “strategic social investor” that is one who, on making a social and economic investment, also obtains additional benefits such as a good reputation in conjunction with economic gain, the argues that this can apply to national strategies for growth and investment, especially in the case of e-Governance, as it involves developing elements of e-Democracy and e-Community, which are primarily public sector governance and provide societal benefits. Jones (1995) argues that instrumental to the theory of stakeholder management is a synthesis of ethics and economics for societal gain as well as competitive advantage, enabled through co-operation from all participants to promote mutual benefit for all stakeholders.

2.4 Strategic transformation to e-government: e-government maturity models

Accenture started its annual surveys of e-government development in 2000, characterizing e-government progression via a multi-stage “publish, interact, transact” model (e.g. Accenture, 2000b, 2001). Later, the model was extended to incorporate the notion of the transformation of government – redesigning processes so as to put the citizen at the centre (Accenture, 2002). This transformation involves structural and cultural change within government. In 2003, the model was further revised to five stages:

- (1) online presence;
- (2) basic capability;
- (3) service availability;
- (4) mature delivery; and
- (5) service transformation.

In moving to the highest stage of e-government (i.e. service transformation), Canada demonstrated its ability to apply leading-edge practices, such as involving customers in service development and identifying/focusing on high-value services.

A similar staged development model was articulated by Chen (2002), who argues that e-government delivers its content and services through the continuum of the four levels of interaction:

1. by enabling information search by citizens via the internet;
2. by evolving into providers of two-way communication services such as simple groupware functionalities like web forms, e-mail and bulletin boards;
3. by facilitating transaction services for businesses and citizens; and
4. by transforming practices and services from government to the agents and the community (e.g. e-voting or opinion poll).

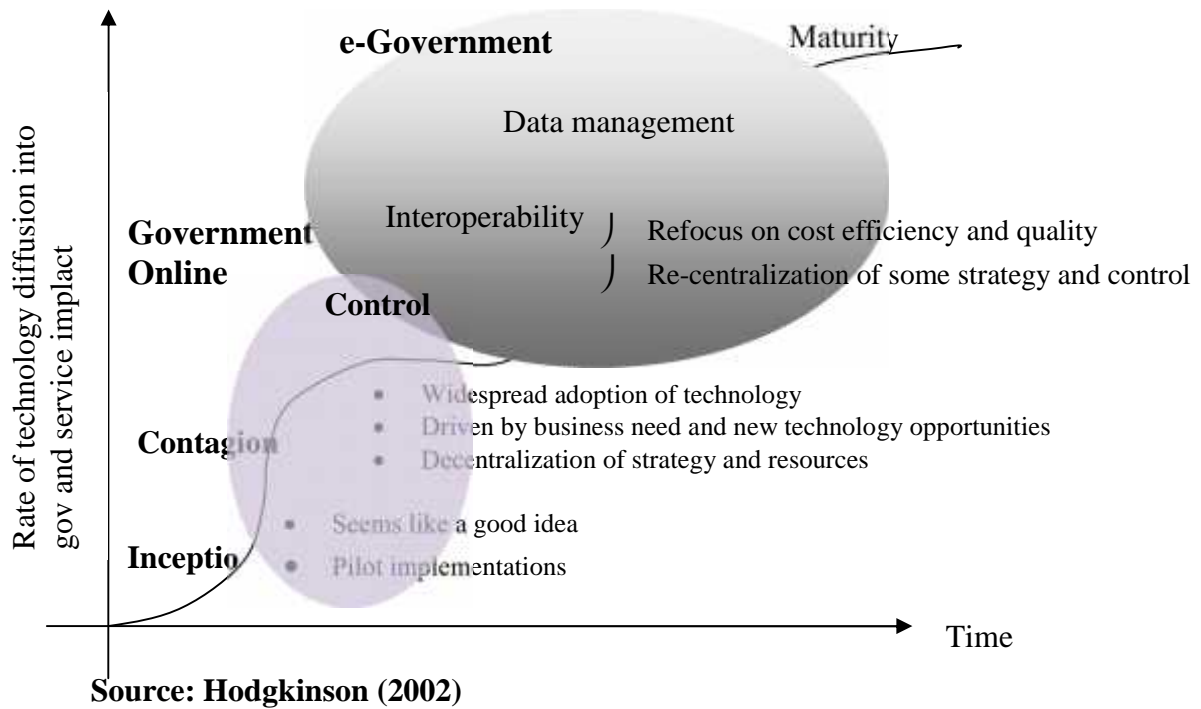
He further argues that most e-government initiatives are moving upwards in the continuum. Both these development models focus on the service delivery or “e-commerce” side. However, another transformation model (Hodgkinson, 2002) suggests that e-government progresses through a learning curve for its back-end (e-business) activities, similar to the learning curve of data processing maturity of a six-stage growth model proposed by Nolan (1979).

Mature e-government is characterized by high levels of capability and performance on multiple dimensions. Performance dimensions include the government’s ability to offer the vast maturity of suitable services with an e-delivery option, and a large number of citizens and organizations making use of them. Capabilities include the ability to share data and information across government units, reduce process times through workflow and ERP systems, and the ability to capture and share knowledge of government employees. It also includes the ability to assess performance, through monitoring systems such as a balanced scorecard (see also Martinsons et al., 1999).

A mature e-government will also differ from a less mature one in other areas, such as IT management by senior CIOs, an effective management structure, regular planning and re-engineering activities to determine areas for improvement and making the changes to capitalize on the improvement potential, and by an IT (ICT) architecture that fosters

integration, enables government-wide standardization, and offers the above-mentioned performance

Figure 2.1: e-Government Maturity Model



e-Government Maturity Model 1

The transition from government to e-government appears to be inevitable for many governments around the world. Just as the influence of e-commerce in the global economy has swelled over the last decade, so e-government can also be expected to develop. This development is also in line with the focus on “new public management” (Bevir et al., 2003; Gendron et al., 1999; Hood, 1991), which tries promote an agenda of citizen-centric and accountable government, and views the citizen in part as a customer, though Ciborra (2003), amongst others, is highly critical of much of this rhetoric. There are fundamental differences between e-commerce and e-government which demand attention, notably the often monopolistic status of government, the fact that governments have the moral and legal responsibility to serve all of their citizens, and the need for governments to have a high level of legitimacy. There are also similarities, such as the need to drive down costs, the need to

provide quality services to citizens (customers), and the expectations that citizens (customers) have for a user-friendly 24/7 service.

Here, an alignment-based maturity model of the government to e-government transition process has been developed and illustrated. This incorporates a number of preferred and less preferred transition strategies. We suggest that future research should assess the extent to which this model is validated by e-government reality, in particular the way in which e-government develops from initial rhetorical intentions through strategic planning, systems development, integration and finally transformation.

It may well be that a post-transformation stage will emerge, since strategic planners are unlikely to be content with any current position: it is in their blood to be generative, to conjure up new services, new dynamics, new forms of transformation, and new ways of involving citizen participation. Such innovations may well change government as we know it today, though this may be little more than wishful thinking in the case of the more authoritarian governments that do not tolerate political opposition. Nevertheless, we expect that the increased dissemination of information that is inevitably associated with e-government can only have a positive impact (from the citizen's perspective) on the way governments are run and are held accountable. The more guidelines, rules, practices and lines of accountability that are made publicly available, the more transparent government will be.

2.5 The opportunities of e-government

Early adopters of web-enabled technology applications tended to automate existing business processes, with little redesign or innovation. Typical approaches involved automation of the front-end web presence so as to spark e-commerce activity, but failed to integrate and redesign the business as a whole in order to make it truly web-centric. The same was true of early e-government initiatives – there was a scramble to get as many services or web pages up with little regard to quality, service level or appropriateness for the citizenship. However, as Burn and Robins (2003, p. 26) observe, “e-Government is not just about putting forms and services online. It provides the opportunity to rethink how the government provides services and how it links them in a way that is tailored to the users' needs”. This rethinking must

necessarily include disavowal of the “build it and they will use it” mentality that infiltrates much web-enabled thinking. (Davison, Wagner, & Robert, 2005)

The failure of many dot.coms to garner business, and indeed the proverbial failure of the horse to drink the water proffered, should alert governments to the risk that e-government initiatives may also go hideously wrong. (Davison, Wagner, & Robert, 2005) Consequently, “government must develop a far more sophisticated view of the people it is there to serve and devolve real power as an integral part of its approach to e-government and provide more freedom of information” (Burn and Robins, 2003). If the governments can achieve this radical new conception of their role, then there is the potential for e-government to transform “not only the way in which most public services are delivered, but also the fundamental relationship between government and citizen” (Symonds, 2000, p. S3). This implies, of course, not only e-government but also e-governance – if real power is really to be devolved to citizens. There are many opportunities for e-government applications, whether they involve the provision of information, handling complaints and queries electronically, processing applications for permits/licenses electronically, paying taxes, duties, and fees electronically.

2.6 Barriers to e-government implementation

The sense that governments are in fact ill-prepared for these opportunities is made by Marche and McNiven (2003, p. 75), who note that “public administration has a general reputation for functional insularity. The tendency to not integrate service provisioning across government departments when responding to citizens’ needs”. It is suggested that the cause of this functional insularity is intrinsically associated with “deeply entrenched practices and cultures” (Marche and McNiven, 2003), as well as the inherent difficulties associated with integrating operational procedures and information systems, which may not be computer-based, among individual government agencies, departments and bureaux. Specific barriers associated with the e-government initialization process are many, including issues of citizen privacy and security, inadequately skilled citizens and government employees, and the tendency for e-government to replicate traditional government, i.e. perpetuating the functional insularity (Marche and McNiven, 2003). Finally there is the issue of access: the

digital divide between the haves and have-nots in society is still a huge one, and sadly many of the people who might stand to gain most from e-government are the least connected, least educated, and least aware of how to do so

Characteristics of good e-government: The government to e-government transition process offers governments a unique opportunity to enhance not only their operational transparency, clarity of purpose and responsiveness to citizens (Marche and McNiven, 2003), but also their own internal efficiency and effectiveness, important concerns in times of economic downturn and increasing public pressure for internal accountability. However, achieving transparency requires significant “internal process redesign that hides the internal complexity of transactions” (Marche and McNiven, 2003, p. 76) from citizens who really don’t care which department provides a particular service, or who they are paying, so long as they can get it. This transparency is likely to increase citizen empowerment –they will be able to access information of their own choosing, rather than merely accepting whatever explanation is provided (if any) by the (in)competent authorities

There are both similarities and differences between .com and .gov, both of which bear closer attention. Individual B2C customers will have a general experience of the 24/7 world where they can do anything, any time and anywhere. As citizens, it is likely that they will expect a similar level of service from e-government – a one-stop shop service that is simple and capable of personalization (see also Thong et al., 2000).

Achieving such a service requires changes in the way government functions: it needs significant inter-departmental cooperation. Citizens are more likely to develop loyalty towards those e-government portals that are citizen-centric, that are designed to address their needs.

A key difference between e-government and e-business concerns loyalty. E-businesses have tried to develop customer loyalty with customer relationship management (CRM) so as to encourage customers to return time and again to buy their services or products. So long as customers need to buy, they may indeed return. However, with e-government, loyalty is rather different. E-governments should encourage digital loyalty, i.e. the preference of citizens to use digital services over other forms (e.g. counter, mail, fax, telephone), since digital services should be much cheaper to provide. Yet at the same time, since governments by definition operate as a monopoly, they may perceive that they don’t need to spend extra effort to compete with other providers. That said, some government services such as the Post

Office (not a government service in all countries) may well face private-sector competition in the form of courier and parcel delivery firms, so it is unwise to assume absolute monopoly status. At a higher level, a government can also be considered to be in competition (e.g. for investment or human resources) with neighboring governments, whether in nearby cities, regions or countries. In this sense, Singapore and Hong Kong compete with each other for international business: the quality and extent of their e-government services are part of the competitive environment. Nevertheless, e-government services should be designed so as to help citizens get in, find their information or transact their business, and then get out as efficiently as possible.

It is useful here to refer to the paper by Choudrie, Weerakody and Jones uses two comparative case studies (an urban and a rural area) and a combination of qualitative and quantitative data to identify the challenges being faced by the UK government in ensuring e-government products and services. The authors report that citizens' background influences accessibility to e-government services in the urban area, whereas geographic location related issues were posing problems to the same in the rural area. While most of the e-government initiatives are currently focused on providing information and basic public services, the authors believe that the success of (Cibbora, 2005)e-government will largely depend on providing value added service to citizens. (Sarikas, 2005)

E-government is information and communication technology (ICT) applied to ordering at least three kinds of processes. First, it attends to the relationship (transaction) between the administration and the citizen (customer) and the related re-engineering of the activities internal to the administration (Bellamy and Taylor, 1998).

The programme relies on four foundations:

- (1) Introduction of e-services;
- (2) Infrastructure development;
- (3) Education and training; and
- (4) Legal change.

2.7 It focuses on the following broad objectives

-) increasing information accessibility
-) improving government performance and efficiency
-) reducing costs
-) enhancing the competitiveness of government
-) ensuring transparency and visibility
-) promoting the ICT sector
-) e-skilling the public sector
-) and boosting e-commerce activities.

The epochal transformation of a government department from a public security/military culture into a market-like service is just one extreme instance of the changes implied by most e-government applications (The Cabinet Office, 2000). The epochal transformation of a government department from a public security/military culture into a market-like service is just one extreme instance of the changes implied by most e-government applications (The Cabinet Office, 2000).

This is part of a wider shift whereby citizens become customers, as recommended by the new public management movement (Ferlie et al., 1996; Barzelay, 2001). However, such a move has wide-ranging implications (Fountain, 2001b), which can explain the difficulties today's prevailing style of e-government applications are encountering, especially in economically less developed countries (Pratchett, 1998). First, the notion of "customer" entails a number of market mechanisms, which cannot be completely transferred to a public administration possessing a monopoly of the service. For one thing, in a competitive market the customer has choice, which is not always the case for the citizens/customers (who else can supply driving licenses besides the DVLD?). Also, citizens have no real exit option and prices do not reflect the matching of supply and demand for this service.

On a closer look, another difference stands out: firms try, primarily, to satisfy shareholders and not customers. Customer relationship management does not have a value per se, but only as an instrument to increase shareholder value. In order to do that, firms proceed to segment the market; and to implement various forms of price discrimination: tactics that can increase

the inequality among customers. But equality of service is, in principle, the goal of an administration providing a universal service. Furthermore, any attempt to govern transactions through market-like mechanisms implies a certain degree of standardization of the service provided. The less such a service can be standardized, the more the bureaucracy, especially the one facing directly the customer/citizen (the so called “street level bureaucracy”), will be involved in stereotyping, simplifying, and basically serving those clients who are easier to serve – given also that the bureaucracy is subject to internal performance monitoring. This will generate a new form of discrimination based not on price, but on access and relative ease of interaction.

It is then not so obvious that by introducing more efficient electronic transactions, a bureaucratic or military administration will become more transparent, efficient and market-like. First, it will maintain its monopoly. Second, it will be compelled to standardize services so as to be able to offer them electronically. But such standardization will entail stereotyping, segmenting, and privileging those segments of the population that can access the services more easily. Democracy will not be increased, nor competition: favoritisms and bribery might simply be offered to new intermediaries.

2.8 E-government and service orientation

Maria A kesson, 2008 reviewed 27 related articles in the e-government and has found following interesting findings. The conceptual literature goes far in its prediction of the changes that the introduction of e-government might result in. The empirical literature, on the other hand, displays a more restrained attitude concerning e-government introduction and the changes that have actually taken place. Service design, service systems, service encounters, service leadership, and human resource management are sub categories of service orientation and are used to structure this literature review section. (Akesson, Skalen, & Edvardsson, 2008)

2.9 Service design and e-government

The major themes to emerge from the literature review with respect to service design and e-government were efficiency and the integration of services to meet citizens' With respect to efficiency and integration in service design, the USA E-Commerce Policy (2000) noted that e-government creates efficiency by providing citizens with relatively inexpensive, real-time access to consistent, up-to-date information and transaction facilities. Choudrie et al. (2005) concurred in stating their belief that various government services have to be integrated because a citizen should be able to access all services in a single transaction. Horizontal and vertical integration among various services and departments of government was suggested by Daniel and Ward (2006). This view was endorsed by Ebrahim and Irani (2005), who advocated a one-stop e-government portal. These authors argued that the availability of integrated digital data from various organizations might result in improved access to government resources, reduced service-processing costs, and a higher quality of service. This is inline with Bellamy and Taylor (1998) who argue that one-stop services simplify and enrich contacts with government organizations.

Fagan (2006) argued that the implementation of e-government involves four phases:

- (1) The dissemination of information.
- (2) The provision of forms.
- (3) The ability to perform transactions.
- (4) Government transformation.

Of these, the second and third are directly concerned with the design of the service. Fountain (2001) emphasize that a thorough understanding of the design and use of ICTs require institutional forces to be studied.

Torres et al. (2005) and Heeks (2006) showed that concerns about security and confidentiality are major barriers to the development of e-government. Services must therefore be designed and delivered in a safe and trustworthy way. In addition, laws for the protection of personal and confidential data and effective authentication systems are required to enhance the trust of citizens in electronic transactions.

Ho (2002) argued that e-government represents a paradigm shift in the organization of the public sector. According to this author, the “e-government paradigm” is characterized by innovation, learning, and entrepreneurial organization. This is a shift from a bureaucratic emphasis on matters of concern to the supplier (such as cost efficiency) to a focus on users – including satisfaction, flexibility in service delivery, and efficient links with relevant parties (both internal and external) (Ho, 2002). The two paradigms are reflected in two common types of portal design:

(1) Information-oriented.

(2) User-oriented.

The former offers a remarkable amount of web site content, but the latter categorizes information and services according to the needs of different groups of users. The fact that web sites are being designed to deliver the required service to targeted customers is a sign that service design in e-government is evolving.

Nevertheless, according to Ho (2002), most public-sector entities remain in the “bureaucratic paradigm”, and these agencies tend to organize their web sites according to the administrative structure of the government, not according to the needs of efficient service delivery. Bellamy and Taylor (1998) state that the information and communications capabilities associated with ICTs are deeply challenging the institutional order of governance.

2.10 Service systems and e-government

The major themes to emerge from the literature review with respect to service systems and e-government were an integrated architectural framework of processes and ICT systems among various government agencies and the inclusion of the tools and techniques that are required to promote the security of e-government.

According to Narver and Slater (1990), the coordinated use of resources across the whole organization is required to reach the goal of creating real customer value. According to Landsbergen and Wolken (2001), this horizontal integration has the potential to reduce the paperwork burden in the public sector, and Reschenthaler and Thompson (1996) contended that it enables public-sector agencies to act more *promptly and effectively in meeting the needs of citizens*.

However, Criado and Ramilo (2003), in their study of Spanish municipality web sites, noted that ICTs are not necessarily producing drastic changes in the core structures of government or the institutional basis of government activity. Ebrahim and Irani (2005) argued that an integrated architectural framework is required for an e-government portal. Such a portal must be designed in a manner that allows a variety of government agencies from different geographical locations to share and exchange data, independently of formats, devices, and underlying architecture.

The e-government architecture must thus define common standards among government agencies in terms of infrastructure components, applications, technologies, business models, and guidelines for e-commerce. Fountain (2001) mean that e-government have the potential to dramatically change the function of the public sector by this across agencies portals.

However the ICTs cannot by itself create social cooperation in the absence of a base of trust. If easier communication and coordination lead to enhanced trust, then it is a contribution of technology. Fountain (2001) is however accurate in pointing out that the Internet does not substitute for the development of social relations. According to E-commerce Developments (2003), the quality and accessibility of e-government requires governments to explore new relationships with government agencies, including the integration of the IT processes and systems of various government agencies. This can present major difficulties, but it is necessary if value-added services are to be provided to citizens (Choudrie et al., 2005).

The issue of security is an important aspect of service systems in e-government. According to a 2002 survey of local authority e-government policymakers in New Zealand, consumer confidence and trust in performing online transactions is critical to the success of e-government (Deakins and Dillon, 2002). These authors emphasized that the service system must include tools and techniques that promote the security of e-government.

2.11 Service encounters and e-government

Maria A kesson, 2008 reviewed the literature and found the major themes to emerge from the literature review with respect to service encounters and e-government were:

-) A reduction in employee numbers
-) The advent of non-standardized services in the public sector
-) Savings in time, product prices, and transaction costs
-) The effects of the so-called “digital divide”
-) And. the importance of training employees in technology relating to e-government.

Milward and Snyder (1996) noted that the introduction of technology has led to a reduction in the number of middle managers because IT is increasingly taking over many of their duties. Furthermore, web sites are replacing staff on service desks, and case managers and adjudicating officers are being replaced by advanced information systems (Bovens and Zouridis, 2002). According to Schedler and Scharf (2001) and Schelin (2003), e-government is based on a constant orientation towards the customer. In this regard, Ho (2002) noted that the standardization of public-sector services is becoming increasingly outdated because e-government offers customized services that are based on customer preferences and needs. Because citizens can access the information they need by themselves, e-government creates the potential for savings on product prices and transaction costs (Deakins and Dillon, 2002).

Ho (2002), Schelin (2003), and Milward and Snyder (1996) all noted e-government transforms the traditional service encounter by reducing face-to-face interaction and facilitating the access of citizens to government services without the need to negotiate a bureaucratic hierarchy. In contrast to this view, Deakins and Dillon (2002) reported a survey conducted in New Zealand in which most respondents did not expect an information-rich web site to reduce the need for face-to-face interaction. Ebrahim and Irani (2005) provided examples of how interaction with the government will be conducted through the advent of e-government – including the increasing accessibility to government web sites via private PCs, Internet kiosks, mobile phones (WAP), digital television, and call-and-contact centres.

Deakins and Dillon (2002) explored the question of whether some citizens might be deprived of equal access to government services if traditional forms of interaction are not maintained. Their concerns in this regard refer to the so-called “digital divide”, whereby socio-economic, educational, and geographical factors play a part in inhibiting the access of some citizens to computers, the Internet, and digital technology (Choudrie et al., 2005; Deakins and Dillon, 2002). In particular, Choudrie et al. (2005) argued that the lack of Internet and broadband

connections in some geographical locations restricts citizens from accessing e-government services, thus inhibiting the implementation of e-government. Heeks (2006) is also concerned about the digital divide and he emphasize that electronic services should be seen as an additional method alongside traditional face-to-face and phone-based methods. Otherwise the poor and disadvantaged will gain last and least from the new technology.

Empirical and conceptual research is in agreement regarding the importance of educating employees in technology relating to e-government. According to Heeks and Davies (1999), Ho (2002), Schedler and Scharf (2001), and Thompson et al. (2005), insufficient staffing is a major obstacle to the implementation of e-government. This was confirmed by Moon (2002), who showed that 837 of 1,471 US municipal governments lacked technical staff and that this was acting as a barrier to the implementation of e-government. Hence, as Heeks (2006) puts it, technology is important to e-government but people are more important. He also mentions that a gap between the competencies staff currently hold and those they need is likely to occur.

2.12 Leadership and e-government

The major themes to emerge from the literature review with respect to leadership and e-government were the need for

-) Comprehensive strategic planning and more resources
-) Shared e-government goals and objectives
-) Strong leadership
-) . The importance of ensuring that the benefits of the services offered by e-government should be clearly emphasized to citizens. (Akesson, Skalen, & Edvardsson, 2008)

An e-government strategy is considered to be a key mechanism to produce centralized approach benefits, particularly cost savings and a fit between systems and organizational objectives (Heeks, 2006). Moon and Norris (2005) noted that municipal administrations that pursue e-government initiatives using a comprehensive strategic plan and more resources tend to achieve better results in terms of managerial and organizational change. Daniel and Ward (2006) reported on a West Sussex (UK) initiative in which the major investment was not so much in technology but in change management. In this initiative a “director of

community Engagement and organizational development” was appointed, whose responsibilities included e-government and organizational development.

Lam (2005) emphasized the importance of shared goals and objectives in noting that the joint planning of projects by multiple government agencies is delayed if there is a lack of clarity in the definition of roles and responsibilities and lines of ownership. In a similar vein, Ke and Wei (2004) identified strong visionary leadership and strategic planning as crucial factors in a successful e-government strategy in Singapore. The importance of strong leadership was also addressed by Heeks (2006).

Burn and Robins (2003) found that leadership from the top, together with an atmosphere of open communication and participation is an important ingredient of an effective cultural mix for a successful e-government project. Hatch and Schultz (1997) emphasized that the actions and statements of top managers have a profound effect on the organization’s cultural identity.

Kannabiran et al. (2004) identified an important aspect of service leadership in e-government by noting that citizens are no longer interested in which public official is responsible for which public service; rather service leadership in e-government is reflected in service integration. Both Ho (2002) and Landsbergen and Wolken (2001) have pointed out that the convenience and satisfaction of users requires service integration among existing functional departments across all relevant agencies and their departments. Choudrie et al. (2005) argued for service leadership in the form of marketing campaign in a UK urban area to underline the benefits of e-government to citizens.

2.13 Human-resource management and e-government

The major themes to emerge from the literature review with respect to HRM and e-government were:

-) organizational culture
-) Information-sharing and the need for improved communication across traditional bureaucratic lines
-) Resistance of members of staff to change
-) And enterprise portals as a key resource for employees.

The authors reviewed here were unanimous in stating that an appropriate organizational culture is crucial to success in the implementation of e-government (Choudrie et al., 2005; McIvor et al. 2002; Torres et al., 2005; Daniel and Ward, 2006; Schedler and Scharf, 2001). The introduction of e-government requires increased openness with stakeholders and the overcoming of social exclusion (Choudrie et al., 2005; Schedler and Scharf, 2001).

According to Schedler and Scharf (2001), public-sector service delivery has, in the past, entailed departments and individuals performing their duties in isolation; in contrast, e-government requires them to collaborate with colleagues across traditional boundaries. Choudrie et al. (2005) noted that staff members can exhibit resistance to such changes in their roles and responsibilities, and Burn and Robins (2003) contended that overcoming this resistance requires the organization's vision for change to be embraced at all levels. According to Deakins and Dillon (2002), internal culture is a significant factor to be taken into account in determining the success of e-government, and one respondent in Daniel and Ward's (2006) study noted that differing professional backgrounds in the various services can mean that people come from corporate cultures, which can act as a barrier to the smooth function e-government.

McIvor et al. (2002) took a more positive view of cultural change within organizations that adopt e-government. They concluded that the introduction of intranets and associated ICT has the potential to facilitate cultural change by enhancing internal communication and changing attitudes towards greater commitment to innovation, creativity, and collaboration.

Choudrie et al. (2005) noted that a requirement to share information and link up with other government institutions can threaten the established hierarchies that exist among some local government employees. Improved communication and interaction across traditional bureaucratic lines is required to overcome these problems and facilitate integrated services (Schedler and Scharf, 2001; Schelin, 2003). Verton (2000) reported on an initiative that aimed to develop a "virtual office" model for e-government services. According to this model, employees could work from home or from telecommuting sites. However, none of the employees was keen on the "virtual office" culture, and internal resistance had an adverse effect on the success of this e-government initiative.

According to Torres et al. (2005), the only benefits for the administration that the interviewees in their study could agree on were improved customer satisfaction and more

flexibility. The respondents dismissed other benefits relating to employees – such as new career opportunities and higher salaries.

Moon's study (2002) of e-government at the municipal level showed that only a few municipal administrations claimed that e-government programs had been effective in specific areas in terms of cost savings, reductions in numbers of staff, and changed roles of their staff, although many agreed that e-government initiatives had resulted in an improvement in overall efficiency in the workplace. Moon (2002) also concluded that many respondents thought that e-government practices reduced time demands on staff, but increased task demands.

The review of literatures concludes that there is a gap between empirical and conceptual research in the field of e-government. This gap has several dimensions:

-) Many of the writings in the field of e-government and service orientation are of a normative and predictive nature
-) Presumptions concerning a paradigm shift (as predicted in the conceptual literature and alluded to in this paper) receive very little support in fact (as reported in the empirical literature)
-) the empirical literature reveals changes other than those proposed in the conceptual literature
-) And Empirical research into service orientation in the field of e-government is scarce.

It is apparent that more empirical data are needed to understand the effects of e-government on organizations, and the present authors contend that comprehensive case studies or well-designed surveys might be suitable for this purpose. (Akesson, Skalen, & Edvardsson, 2008). Most research is still informed by narrow rational views on organizations despite of the excellent work of Fountain (2001). This theoretical myopia prevents a deep understanding of the effects of e-government initiatives on organizations. (Akesson, Skalen, & Edvardsson, 2008)

Since the review show that the predictions in the conceptual e-government literature to a great extent have not been realized, use institutional theory to understand the reasons to this inertia. Analyzing inertia is usually seen as the main strength with institutional theory. Institutional theory should be seen as an alternative to rational organization theory. The latter,

who the bulk of research into e-government is founded on, has conceived of organizations as consisting of rational actors (e.g. Taylor, 1911) or at least actors that have the ability to reach bounded rationality (Cyert and March, 1963; March and Simon, 1958). According to this paradigm, management are given the role of developing goals and formal organizational structures designed to support goal attainment. The personnel are expected to act in accordance with the goals and the prerogatives embedded in the formal structure. In contrast, institutional theory argues that organizations are embedded in the environments that shape them including their formal structures (Scott, 1995). According to this view, organizations must obtain “legitimacy” from their environments if they are to survive. However, the environment is often characterized by conflicting demands, making it problematic for organizations to adjust their operations in accordance with all the various demands placed upon them. In order to deal with this conflict, a central argument of institutional theory is that organisations adapt their formal structures to external demands, in this way gaining legitimacy from the environment. But institutional theory also holds that formal structures and real activities are “de-coupled” (Meyer and Rowan, 1977; Oliver, 1991).

According to this view, an organization gives the impression of having adapted to its environment, while simultaneously carrying out its activities as it did before – thus avoiding the conflicting demands imposed upon it by the environment. In this regard, Abrahamson (1996) has used the term “organizational fashion” to describe the phenomenon whereby change processes appear to affect organizations profoundly, whereas the reality is that these apparent changes are only a facade. From an institutional perspective, e-government is an “institutional pressure” in the environment of public organisations. To be considered “legitimate”, organisations are expected to adapt to these demands, and the conceptual literature can thus be understood as a summary of the demands being made upon public-sector entities in terms of organizational design, implementation, and expected effects. The disappointing results reflected in the empirical research can be interpreted, from an institutional perspective, as indicating that e-government is only loosely coupled to organizational action.

According to this view, e-government has thus far served as a means of legitimizing the survival of public organisations and can be treated as an “organizational fashion” (Abrahamson, 1996) rather than “organizational action”. If so, the talk of a “paradigm shift” (Kuhn, 1962) is at best inappropriate, and at worst misleading. The problem with some

research into e-government is that it is guided by a rational view of organizations thus holding that the formal organization really affects organizational action.

Within service research, the governmental service sector has not been studied to the extent that private service industries and companies have. Pressure to change has been, and still is, forcing major improvements within the public sector and governmental services. (Enquist, 2006) . In the private sector, the market creates pressure for change and quality improvement due to customer choice regarding both the service and the service provider. When it comes to governmental services, however, customers are captive since they have no real choice when it comes to the service provider. Thus, the conditions governing quality improvement are different, and (Enquist, 2006) argue in their article that a focus on the external drivers is a fruitful way of understanding quality improvement.

Customer needs and expectations are changing when it comes to governmental services and their quality requirements. In addition, the mission of governmental service organizations is changing as well. (Enquist, 2006). Quality within the public sector has been a “hot” topic of debate during the past 20 years. There has been frequent criticism of poor quality (Osborne and Gaebler, 1992) within the public service sector without much of a definition of what constitutes good or high quality. If there has been consensus regarding what constitutes high quality, there has not been any consensus regarding how to achieve this standard of high quality. One of the key concepts behind exposing the public service sector to competition is that choice for the customer creates a pressure to change, resulting in better quality services in relation to costs. In other words, the taxpayers’ money is used in the most efficient way (“squeeze more bang out of every buck”; Osborne and Gaebler, 1992).

A service can be described as a chain or a constellation of value-creating activities or events, which in turn form a process in which the customer often participates by performing different phases of an interaction with the service organization’s co-workers (other customers or equipment/apparatus) with the goal of achieving a certain result. Many governmental services are produced in interaction with the customer, and therefore the service characteristics presented above will be applicable. (Enquist, 2006)

The service concept refers to the agreement between the customer need and the service offering. Quality in the service concept requires that the service being offered matches the customer need that it is attempting to fulfill. The service process refers to the chain of

sequential and parallel activities that comprise the service. The customer participates in the service process by performing activities and often by interacting and communicating with frontline personnel. The design of the service process should ensure that the service being offered is implemented to the satisfaction of the customer. The service system refers to the resources and the organizational structure existing in the service company and supporting the service process. The service process requires the support of the resources and organization of the service system. (Enquist, 2006)

The description and the analysis will focus on two levels:

- (1) The operational level where the focus will be: how the service concept or service offerings are designed relative to the needs of the target group; the design of the service process; the design of the service system in terms of resources, structure, and culture.
- (2) The strategic level, where we focus on the interplay between and the interdependence of service strategy and service culture.

(Enquist, 2006) argues in their research finding, in relation to the service quality framework: concept, process and system that three lessons can be learned from the three cases:

(1) The service concept must be in line with and match the target group to be served. If there is a gap between what is offered on the one hand and the customer's real need and what is expected in terms of service outcome on the other, the organization will have an inherent quality problem. Needs and expectations, regarding governmental services, change over time. These expectations may develop from experiences with different service organizations, and can be described as socially constructed norms forming part of the public service "market" orientation.

(2) The service process must be understood and accepted by both the employees and the users/customers. If this is not the case, mistakes will happen, defects will result, and customers will become dissatisfied and will then complain. Customers and employees must be trained and supported in their role as service producers, since both carry out activities in the service process. Managers must be able to manage the service process and design it flexibly. Involving customers more is one way of designing more flexibility.

(3) The service system is a question also of norms and values forming the basis for a service culture that supports the service process, ensuring that the service being offered is realized in the manner intended. Information technology plays a key role in the service system, and has been used to both cut costs and increase service, especially as regards accessibility and enabling customers to carry out different activities themselves. Not all managers seem to view this as an option, at least not in terms of something which has to do with quality improvement.

We can conclude that the pressure for change experienced by governmental organisations is not very different to that experienced by commercial service companies. The customers are most often the same people, with the same or similar needs, expectations, and requirements. Quality is assessed in more or less the same way. The differences seem to surface when we take into consideration how external changes exert pressure for change within the organisation, and the design and delivery of governmental services.

Furthermore, we need to pay attention to the consequences of not being responsive to external changes. The “market” does not take care of the change process as in commercial services. But this study shows that external pressure for change exerted by customers/users can be a major driving force for quality improvement, even though governmental organisations operate in a “monopoly market”. What turns out to be important for the “principals”, the politicians, is making sure that the organisation has the right mission vis-a` - vis those it serves and that its internal culture can meet these needs. This can be followed by a dialogue with the customers/citizens and a well-developed performance management system (Enquist et al., 2005). Here, the external pressure is important for continuous quality improvement. Enquist (1999) has discussed moving towards a service culture as a long-term process whereby engagement, cooperation, trust, and ethical norms are developed between the protagonists. From the study, we can conclude that the strategic process as such is no different in governmental organizations, but that the norms and values forming the organizational culture are very different. Instead of focusing on customer needs, expectations, and perceived service quality, it is more natural to focus on the mission and tasks, and to pay attention to internal standards as a basis for quality improvement efforts. In Edvardsson and Enquist (2002), we stress that the more physical side, “the value logic”, must be dealt with at the same time in dialectic with the more underlined dimension “the logic of values”, where we can feel these cultural expressions of values and meanings. Institutional changes, in terms

of laws and regulations (Kaplan and Norton, 2004) and the changing needs of external stakeholders as customers, result in a constant pressure for change and quality improvement in governmental services, too.

Stakeholder needs are institutionalized norms and values (Post et al., 2002) and quality is assessed when these expectations are compared with the governmental service being received or experienced. Service guarantees and other types of information intended to manage customer expectations will not work unless internal standards are in line with external standards, i.e. customer and citizen expectations. We have learned in this study that the pressure for change, originating from demanding customers, is most important and seems to be the strongest pressure for change. The other main driver of change, according to this study, is “principal” dissatisfaction with operations, specifically for not meeting their goals. The introduction of information and communication technology is one common way of cutting costs while at the same time also developing services in different ways, for example “the 24-hour governmental service”, i.e. transferring some activities to the customer, which we label “customer as co-producer” (Ramirez, 1999). The results of this study are in line with the views presented by Alvesson (2002). All three cases were project-oriented, but the change process must be seen as the long-term process of an organic social movement wherein the groups (stakeholders) interact with each other, supported by minor cultural change processes which re-frame everyday life. The manager leading a change process must have extensive knowledge of both processes: the quality change process on the operational level, regarding concept, process, and system, and the quality change process on the strategic level, where interaction between the stakeholders comes into focus in the dialectic regarding culture and strategy.

2.14 Citizen and Customers

Osbourne and Gaebler (1992), for instance, proposed that citizens should be regarded and treated as customers, suggesting that the delivery of government services should be redesigned with a customer focus. This view is challenged by Mintzberg (1996), who usefully distinguishes customers from clients, citizens and subjects. He points out that you don't have to call someone a customer in order to treat them well or ensure that services are designed with them in mind. Customers buy products, clients buy services, but citizens have

rights “that go far beyond those of customers or even clients” (Mintzberg, 1996, p. 77). Furthermore, citizens not only have rights, but also duties, as subjects: to pay taxes, to be drafted in armies and to respect laws (or suffer the consequences).

2.15 Service quality and public service organizations

While profit motivation has little relevance in the public sector, homogeneity of consumers, definability of tasks and finite and measurable outcomes can serve as likely conditions of success in e-public service. Service quality has been much discussed and researched in the last 20 years with leading service quality measurement models being *Parasuraman (2002)* also begins to examine the issue of e-service quality and offers the following definition: e-Service Quality is the extent to which a Website facilitates efficient and effective shopping, purchasing and delivery of products and services. His initial research in the area indicated that there were 11 dimensions of e-service quality:

- (1) access;
- (2) ease of navigation;
- (3) efficiency;
- (4) customisation/personalisation;
- (5) security/privacy;
- (6) responsiveness;
- (7) assurance/trust;
- (8) price knowledge;
- (9) site aesthetics;
- (10) reliability; and
- (11) flexibility.

Based on a sample of 540 Internet users he concluded that there were four key dimensions:

- (1) efficiency;
- (2) fulfilment;
- (3) reliability; and
- (4) privacy.

Based on analysis of the potential for e-service delivery it is evident that within the public service a further continuum of service complexity based on the predictability of potential for individualization/tailoring of service needs to be considered.

Based on the analysis of potential indicators of e-service quality above it is clear that to the possibility of meaningful measurement of performance organizations must have missions that are uncomplicated or of limited complexity. This assertion is borne out by the 20 target services chosen by the European Commission for e-delivery (Europa, 2003). These are:

- (1) Income taxes;
- (2) job search services;
- (3) Social security contributions
(Unemployment benefits, child allowances, medical costs, student grants);
- (4) Personal documents (passport and driver's license);
- (5) Car registration;
- (6) Application for building permission;
- (7) Declaration to the police (e.g. in case of theft);
- (8) Public libraries (catalogues and search tools);
- (9) Certificates;
- (10) Enrolment in higher education;
- (11) Announcement of moving;
- (12) Availability of appointments for hospitals;
- (13) Social contribution for employees;
- (14) Corporation tax;
- (15) VAT;
- (16) Registration of a new company;
- (17) Submission of data to statistical offices;
- (18) Customs declarations;
- (19) Environment-related permits; and
- (20) Public procurement. (Buckley, 2003)

The proposed continuum is borne out by the empirical evidence offered by Mellor and Parr (2002) in their international study of usage of government online. They studied citizen perspectives on the uptake of Government online and found that while global government online usage was increasing, the main uses were primarily information searches and in downloading forms. Bearing out the earlier distinction drawn between e-government and e-

public service they found that there was very low use of the Internet as part of government consultative systems. Their survey results indicate that the low overall usage of e-government was related to fears as to the security of online transactions. Their research examined information search, transactions and consultations. It did not examine e-public services of higher complexity. (Buckley, 2003)

Need to consider context two further considerations must be included to make this model more meaningful. First, it is important to note that the external environment or context in which the service is offered will impact on the likely success of e-public service initiatives. Specifically the cultural knowledge and readiness for e-delivery, the availability of access to such technology, and the existing national practices vary greatly internationally. (Buckley, 2003)

2.16 e-government and the minimal state

Looking more closely, technology puts into question the wider context and logic within which it is being applied. Does the model of state enabled by e-government really support development (Heeks, 2001)? However, e-government is supposed to be conducive to development, by sustaining good governance. In the strategies of the international organizations like the World Bank and the IMF (gathered around the so called Washington and Monterey consensuses) good governance is delivered by a specific model of “minimal” state, or the service delivery model, of which the marketization aspects analyzed above are a major feature (Kahn, 1997). The model is supposed to address state failures due to governance breakdown, corruption, rent seeking, distortions in markets and the absence of democracy. In particular, the service delivery state can provide law and order, enforce property rights, and deliver public goods and services to the customers/citizens. It is minimal, transparent and accountable. The model comes with the idea that development is enabled by a well working market economy, where contracts can be enforced, property rights are clear and stable, and corruption is low, there are few restrictions on competition (markets are rent free, with few monopolies, no subsidies and ubiquitous access to information), and investors are confident because property rights are stable (North, 1997).

To be sure, such a model of service-delivery, minimal state embeds the style of governance present in advanced Western economies. E-government together with other institutional reforms is aimed at helping nations to leapfrog underdevelopment and attain a final governance configuration that is similar to the one of developed countries. Still, any e-government initiative should entail a due consideration of the problem of governance and development, especially of their dynamic interaction. Namely, (Kahn, 2002): . the few states that actually have experienced a high-growth economy do not rank highly on the various dimensions of good governance (corruption, democracy, transparency, etc.); and the institutional reforms needed to transform the developing country into an advanced one portray only the end state”, but do not tell us anything on how to actually enact the transition from the initial to the end state.

In particular, it is hard to establish a clear correlation between the service-delivery state and development (Kahn, 2002). Actually, the few high growth economies in Asia show that their earlier decades were characterized by a much more interventionist role of the state (Wade, 1990),

It is apparent how an efficient model of delivering driving licenses through the internet, as a notion, may clash with the entrenched ways of working of the administration, and in general, with the extant model of the state and the nature of the relationship between state and citizen. In other words, while focusing on good governance, the minimal state and e-government, the consensus policies tend to underestimate what it takes to imitate learn and implement new conducts, procedures and practices.

Looked at in this perspective, the role of ICT is less clear-cut, less significant and, most probably, irrelevant. First, what matters are transformation and learning capabilities, which are not necessarily supported by efficiency-enhancing applications (Fukuda-Parr et al., 2002).

The distinction is subtle but of great importance. E-government for good governance is simply a description of the applications one could get in order for an efficient government to serve its “customers”. The flaw is that this strategy may work where the state has already a typical advanced country configuration. It does not help the transition, or probably might even hinder it. About developing countries getting trapped in spending resources to push major reforms like e-government on the basis of models, which may not work in contexts that

are significantly different from the advanced ones (Heeks, 2002). The risks could be of more cynicism and disillusion, and investments in ICT could turn into some form of growth-reducing rents.

We can conclude that the present range of applications and systems, usually labeled e-government, is attached to a model of state, the service delivery one, which resembles closely the state form in advanced Western economies. However, there is the suspicion that such a model may be irrelevant to actually triggering development. At the limit, the reverse can be true: once an economy is fully developed, then the service delivery model makes sense and e-government can function, as some, but not all, applications of service delivery in the UK, the USA and other advanced countries show (Fountain, 2001a; Dunleavy et al., 2001)

More specifically, why do countries like the Kingdom of Jordan get trapped in facing high enforcement costs of policies to renew the state through e-government and other new public management reforms? And why do donors and international agencies seem to be driven into the same tunnel vision, of promoting and supporting designs that are unrealistic, since they tend to ignore the complex problems of transformation, and are linked to an idea of state, the e-service delivery one, that actually may not be conducive to development (Wade, 2002)? In sum, technology introduced to order the state apparatus according to a precise model and organization, which also entails the realignment of its functions and relationships with the outside markets, leads us to question whether the models inscribed in the technology of e-government will deliver economic and social development. In trying to address this puzzle, on the one hand we touch the limits of the e-government, good governance and service-delivery state consensus discourse, on the other these experiments with new technologies make reveal and make us reflect upon some important, implicit dimensions of the phenomenon, which now we try to interpret in a wider context (Avgerou, 2002).

The trajectory of e-government in developing countries cannot be identified and understood by looking at the technological features only, or the dynamics of the local public administration in isolation, or development as a separate issue. Rather, it needs to be “reconstructed”, bottom up, by observing the interplay between the various actors involved in the automation initiative. The trajectory of e-government in developing countries cannot be identified and understood by looking at the technological features only, or the dynamics of

the local public administration in isolation, or development as a separate issue. Rather, it needs to be “reconstructed”, bottom up, by observing the interplay between the various actors involved in the automation initiative. (Cibbora, 2005)

Typically, e-government and its counterpart, the self-regulating market, are technologies of control (Beninger, 1986) able to shape the networks and systems of opportunity within which economically less developed countries operate. In this way, control by the metropolitan states is not direct or centralized but flows through a network of open circuits that are non-hierarchical, but “rhizomatic” (Rose, 2000). Note also that behind the notion of “good governance”, as supported by e-government, a subtle shift has taken place: underdeveloped, potentially dangerous states are now monitored and regulated as a social body. Through free markets, accountability, transparency, and corruption-curbing policies, it is the very culture and conduct of people that needs to be impacted. In other words, through ICT and new public management visions what one tries to affect is the “governmentality” of the weak states, that is the way they think about their own functioning and reform, by providing a very specific approach to regulate the conduct of citizens, e.g. by transforming citizens into rational choice customers.

The minimal state, accompanied by new public management and e-government ideas, is the typical reform that the public-private network of aid practice seeks to deliver (Kahn, 2002). Such networks set up originally as short-term remedial interventions tend to become a permanent framework giving coherence and linking aid and political actors (United Nations Development Programme, 2002). E-government is an evolving multidimensional and multidisciplinary field, where many mutually interdependent factors impact its success, acceptance and perceived benefits. The advancements of e-government are expected to grow over time due to technological developments and support from successive governments around the globe. With a plethora of equally successful and failure stories in the field, we have a lot to investigate. (Sarikas, 2005)

2.17 E-governance Initiatives in Nepal

The advent of ICT has brought about a challenge to the developing countries like Nepal to appropriate and adapt the global knowledge available in developed countries. The rapid improvements in information and communication technologies are revolutionizing the way modern governments deliver services to the citizens. Nepal, a developing country has also taken steps towards e-government transformation, similar to the governments in developed countries. (Sukla, 2005). This highly leveraged enabling tool has also redefined the fundamentals and changed the institutions and mechanism of delivery, bringing about a fundamental shift in the concept, manner and method by which the State has to deliver services. In 2006, the Nepal Government made public its plan for initiating master plan to reduce cost and time of service recipients by improving public service delivery. The Government and responsible agencies for ICT are making efforts for the successful implementation of this plan.

First of all, the Infrastructure and Access, a key element of the master plan is in poor state in the country. In Nepal, less the 1% of the population is using Internet and less than 10% people are connected to fix or wireless telephone network. One of the main reasons behind it is due to lack of adequate communication and electricity in the country. The transmission networks which include backbone link, microwave radio network, optical fiber network also have issues such as low quality and availability, frequent trouble in link, low capacity of links. With the present infrastructure, it is difficult to move ahead the plan. (Adhikari, 2007)

Technology adoption is another barrier while introducing digital devices in Nepalese context. Many senior level officers are nearly blind with computer technology. They do not have adequate awareness and even some of them do not want to know the benefit of ICT. The decision making officers in most of the offices are unaware with the advantage of e-Governance. Most civil servants who are enjoying the traditional non-digital technology have an attitude which is resistive to change. Those who are getting extra benefits think that they will not be able to hold the beneficial position after introducing new technology, hence are not friendly with digital devices. (Adhikari, 2007)

Several e-government implementation efforts have been made in development of e-government in Nepal. Literature show that many government, private and NGO and INGOs have been involved in the development and implementation of e-government in Nepal. Primary focus of e-government initiatives have been seen in the local governments of Nepal and particularly focused in municipalities at first phase. Tele-centers established by the collaborative efforts of rural villages and local government are gradually getting priority in their VDC level action plan so as to flow the information of Nepal government through ICT. These tele-centers are not only disseminating Nepal government information in local level but also trying to pull local content in the central level.

Besides these issues, the managing factor also challenging in the implementation of the plan. The key person's strong will to stand on behalf of the project, fostering domestic ICT workforce, introduction of fund mechanism that can attain large scale investment are some other major points to be considered. The measure factors that assess the progress to verify whether the e-Government plan is implemented in the purposed direction, consistently and continuously are also important factors. (Adhikari, 2007)

Despite the prevalence of various adverse situations in the country, the government of Nepal is vigorously pursuing its efforts to reform bureaucracy through e-governance. IT has proved a major factor in breaking down key features of bureaucracy, i.e. hierarchy, division of labor, and rigidity of rules. Old records that used to be tightly wrapped up in big pieces of cloth and piled up in dusty corners in Kanchanpur, a district in far west Nepal, have been placed on hard disks (Sukla, 2005).. Links have been established between the computers of the village committees and those of the district committees. In this way IT is transforming district development planning processes. (Khadka, 2001)

Transparency International - Nepal (TIN) has prepared a website for the government anti-corruption body, National Vigilance Center (NVC) to disseminate basic information about its preventive role, to inform the common people about anti-corruption, and to familiarize individuals and institutions with NVC (20-60/61 B3).

2.18 Rural Urban Partnership Program and e-Governance

The Local Self-Governance Act – 1999 (LSGA) consolidated different acts related to the Local

Bodies (LBs) and provided a platform for decentralized governance in Nepal.

As per the LSGA, the municipalities, as a municipal government of Nepal, are providing municipal services to their citizens. Most of the municipalities are depending upon the traditional systems and are basically focused on the physical infrastructure development. Still, the planning is carried out with the top down approach in many cases without people's active and meaningful participation. With the emergence of Rural Urban Partnership Programme (RUPP), the concept of urban development has taken a new dimension, for e.g., social mobilization, people's participation, enterprise development activities for livelihood options, rural urban linkages for balance development, ICTs, and some affirmative actions to disadvantaged groups (DAG), etc. Out of 58 municipalities, RUPP is implemented in 35 Municipalities and 49 Rural Market Centers (RMCs) in phase wise manner including 15 municipalities that have been replicated RUPP by the Ministry of Local Development (MLD).

Rural Urban Partnership Program (RUPP) brought the concept of implementing e-governance to strengthen good governance and urban development. Since e-governance is one of the major components under ICT (Information and Communication Technology) for strengthening good governance, RUPP together with the Bharatpur municipality have advocated e-governance. After realizing the successful implementation of e-governance in Bharatpur, RUPP is supporting other partner municipalities to replicate the model of Bharatpur e-governance. Municipalities where Internet Service Providers (ISPs) are available at the present time have shown their interest in implementing e-governance and have vigorously started the awareness of e-governance in municipalities through RUPP's community mobilization process. Most of these municipalities have completed the development of an e-governance portal. RUPP has supported all 12 - partner municipalities to establish an Urban Information Center with well-trained permanent staff in the center. The staff was trained in line with the Municipality's commitment to e-governance. Staff has been deployed to operate the e-governance unit of the municipality. Similarly, RUPP has also

established a Human Resource Development Center (HRDC) which, presently, has been strengthened to offer training and orientation regarding good governance and poverty alleviation (Paudel, 2004)

The HRDC have organized trainings on Social Mobilization, Leadership, Gender, Saving & Credit Mobilization, Enterprise Management, Skill Training, Technology Transfer, PMDP, Local Governance, HIV/AIDS, Computer, B2B e-Commerce, Info Mobilization, Tele Center Operation and Management, etc. to more than 69,000 participants including community members and municipal/VDC staffs. Apart from this, the Agricultural Market Information System and National B2B e-Commerce Services were established in partnership with Agro Enterprise Center/Federation of Nepalese Chambers of Commerce & Industry in close coordination with High Level Commission for Information Technology. Similarly, Tele Centers and Cyber Cafes were established with the support of UN Habitat and the World Bank supported TSRP executed by the Nepal Telecom Authority, which is playing a key role in digital divide without any discrimination between the rich and poor. (Adhikari & Shrestha, 2007)

2.19 Harnessing digital means to meet public ends

Realizing that recent advances in the ICT domain offered an enormous prospect for augmenting RUPP's efforts in key areas of its broad operational remit, the Programme introduced municipal e-governance and e-commerce (B2B) based initiatives in some of its partner municipalities and RMC's. For providing easy access of these ICT based services and with the objective of bridging the digital divide, the Programme also contributed in the establishment of Tele Centers/e-Community Centers.

2.20 Objectives of Municipal e-Governance, B2B ecommerce Initiative and Tele Centers

The RUPP's effort in the area of e-Governance draws its relevance from GUG initiatives as envisaged in the Local Self-Government Acts and Regulations enacted by Government of

Nepal. More particularly, the e-Governance initiatives have been guided by the following objectives:

- To increase citizen participation in urban governance
- To increase efficiency and efficacy of services delivered by the municipalities by introducing a range of on-line services
- To enhance transparency in the working of local government outfits – specifically the municipalities

To provide expanded access to information resources to facilitate bottom-up, citizen centric urban planning in line with RUPP's approach of social mobilization The other key area of RUPP's strategic orientation vis-à-vis application of ICTs has been the dissemination of daily agricultural market information and implementation of B2B e-Commerce initiatives by its partner municipalities guided by the following objectives:

- To provide an easy access of price information to enterprises and farmers
- To expand market access to enterprises located in partner municipalities and VDCs by creating a virtual trading hub through ICT's
- To enhance the prospects of regional/international trade linkages
- To establish a single electronic gateway to promote trade linkages in the country

The 10th Five Year Plan had provisioned for the 1500 Tele Centers in the country to establish a two way communication. The Programme pioneered in the establishment of Tele Centers guided by the following objectives:

- To provide an easy access to ICT based services
- To bridge the digital divide
- To establish a two-way communication
- To provide easy information access without discrimination
- To empower women, children and the disadvantaged group

2.21 Municipal e-Governance

In pursuant to its commitment to good governance, with the support of RUPP, the municipalities have adopted a participatory municipal planning process, in which, every member of the Tole/Lane Organization (TLO), a community based organization is

responsible for formulation, implementation and monitoring of its development plans. This has helped to ensure increased participation and consensus in the development of the municipality. Furthermore, pursuing their commitment to transparency, the RUPP has established a well-maintained Urban Information Center (UIC) that is structured both as a data bank of the municipality and information dissemination center of the citizens. Ensuring the financial transparency, the municipality has been fulfilling its statutory obligation of making its annual financial transactions public without any failure. Similarly, the municipalities have placed themselves to address the issue of equity and have adopted gender as a cross cutting issue and have been adhering to gender-friendly policies and strategies. Addressing the issue of equity, they have been able to lift the life of both under-privileged group and urban poor by conducting Entrepreneurship Development Programme. Municipalities have published a citizen charter with the technical support of RUPP to ensure accountability, rule of law, and enhance effectiveness and efficiency in municipal administration and policies. These have enabled the municipalities to set its policies and activities in compliance with all characteristics of good urban governance. As the partnership of public sector, private sector and civil societies is basic a criterion for good urban governance, there already exists a strong partnership of private sector and civil societies with the municipality, which is also well scripted in operational modalities of the municipality. Above all, the municipalities are well established as they are fully complying with the citizen charter. In the context where the municipalities have already taken some strides in the direction of good governance, RUPP, catching the trend of the hour, realized that it would be worthwhile to supplement its effort to good governance with the application of ICTs, which can make a significant contribution to the achievement of good governance goals realizing that the e-governance can make governance more efficient, transparent and effective. Truly guided by the fact that e-governance is the application of ICTs: o To transform the efficiency, effectiveness, transparency and accountability of informational and transactional exchanges within the government (municipal), between government and government agencies at different levels, citizens and business; o To empower citizens through the access and use of information, and o Most importantly, to allow direct participation of constituents in planning and decision-making without any discrimination.

2.22 E-Governance Project concept

RUPP, introduced the concept of e-Governance at partnering municipalities. Since e-Governance is one of the major components under the ICT for strengthening good governance, RUPP jointly with the municipalities had conceptualized the e-governance and shared its Programme concept to the local CCI, civil society, TLOs (community based organizations) and NGO/INGOs working in the municipalities.

The private sector scaled up the network of cyber-cafes as per the need of situation in order to provide e-service to the public. The municipal e-governance was being launched also in coordination with the Ministry of Local Development, Government of Nepal. Realizing the importance and necessity of e-Governance in Nepal, the then Right Honorable Prime Minister had officially launched the e-Governance in Bharatpur municipality on January 10, 2003. Several rounds of workshops were also organized with cyber-café owners and NGOs, line agencies and civil societies in order to secure their ownership on the e-governance.

A well-trained staff deputed for the operation of Urban Information Center was trained in line with the Municipality's commitment to e-governance. Similarly, a well-set Human Resource Development Center (HRDC) played a key role in providing trainings and orientations regarding the use and concept dissemination of e-Governance to the community and municipal staffs.

2.23 Institutional and legal framework of IT in Government

High Level Commission on Information Technology (HLCIT) is an apex body formed under the chairmanship of Rt. Hon. Prime Minister of Nepal with a view to providing crucial strategic direction and helping formulate appropriate policy responses for the development of ICT sector in the country as well as harnessing these technologies to meet key developmental challenges and catalyze and stimulate economic growth for poverty reduction. This in essence positions HLCIT at the centre of all ICT related activities that could have development and policy ramifications

The key objective of the commission will be to oversee the implementation of National IT Policy and strategy as well as to provide strategic policy direction and support to the government in concert with its vision to build a knowledge-based society by creating

enabling environment for the development and growth of knowledge based institutions and industries. The operational ambit of the Commission will also include playing a key role in formulation of appropriate policy instruments in line with the dynamism that characterizes the ICT sector and develop strategies aimed at harnessing information and communication technologies for development, economic growth and poverty reduction

Cyber laws formulation has been completed. A separate office of controller has been established to implement the legal practice of the digital transactions and documents. Some sectors in government are using IT applications, however it is not enough Utilization of IT in the government. The Ministry of Science and Technology (MOST) has installed a VSAT to give Internet connections and develop government network among the government Ministries and Departments. With minor upgrading it will be able to provide access to rural areas up to Village development committee level.

2.24 E-Government Projects

Specially, Financial Management Project (FMP), and Rural-Urban Partnership Program (RUPP) were dedicated to bring the concept of implementing E-Governance in Nepal. FMP is a joint venture project of DFID and HMG/N. It worked for financial management sector for many years. The project is one of the highly successful projects in the ranking of DFID and has provided major impact on enhanced cash flows, improved transparency and disbursement rates, reduced time in budget formulation, authorization and release, immediate financial management information for HMG/N and Donor, improved macro and micro economic management. (ENRD)

Bharatpur Municipality was the first municipality to launch E-Governance in Nepal with support from RUPP/UNDP. After realizing the successful implementation of E-Governance in Bharatpur, RUPP supported remaining partner municipalities to replicate the model of E-Governance of Bharatpur. Municipalities where ISPs are available at the situation show their keen interest in implementing E-Governance and vigorously started the awareness on E-Governance in respective municipalities through the community mobilization process of RUPP. Most of these municipalities completed the development of E-Governance portal as well. RUPP has supported all 12-partner municipalities to establish an Urban Information Center with well-trained staff permanently deputed to the Center. The staff was trained in line

with the Municipality's commitment to e-governance. Staffs deputed to operationalize the E-Governance unit of the municipality. Similarly, RUPP established a well-set Human Resource Development Center (HRDC), which, presently, has been strengthening to cater training and orientation regarding good governance and poverty alleviation.

Obstacles to the promotion and implementation of IT in the Government in Nepal: Some of the major problems faced in the implementation of IT to increase the efficiency in the government are as Infrastructure, IT literacy, Lack of Coordination, Training, IT policy, IT Funds, Political Situation (ENRD)

ENRD suggest success factors of e-Government as follows: Start from simple and small project, Promote awareness, Encourage and Support departments, Involve top leadership, Monitor Assessment, Standardize, Ensure security, Think globally Improve, E-readiness, Telecommunication infrastructure, Governmental human resources, Budget resources, E-Business atmosphere, Plan Nationally, Encourage private sector, (ENRD). (Source: <http://www.enrd.org/egovernance.php> , August 25, 2008)

2.25 Prioritized ICT area by NITC

As published in the official website of Ministry and science and technology, e-Government, Tele-Center, and Databank have been priority area or the focus area of National Information Technology Center (NITC). NITC with support from Korean International Cooperation Agency (KOICA) and HLCIT has drafted national e-governance master plan that has defined practical vision, architecture, infrastructure required, e-government framework, policies, standards and procedures for IT governance and decision making (NITC, 2008)

Tele-center is a work location usually in a different area than the organization's main office that provides convenient access to work with equipments that people don't have at home. The approach to Tele-center initiated in order to shrink the Digital Divide. In general, through the concept of Tele-center, it is aimed to provide the deficit community with the ease of modern Information technological services such as internet, email, fax, photocopy, scan etc in order to help them reach the realm of development. Objectives of Tele-Centers are to maximize use of ICT, provide internet access to rural community, develop knowledge based society, provide information related to agricultures and tele-medicine, search study and employment opportunity.

There are 43 Tele-Centers in different districts throughout the country which were established and managed by the NITC or the HLCIT or in support from different donor organizations like the KOIKA, UNDP. This is important step towards infrastructure development that vital important for the success of e-government initiatives

Data bank is concept of developing a centrally located database which comprises all the important government databases or the information which are regularly updated and could be preserved in a single location and could be accessed by the stakeholder with set of rules and regulations. National Data Bank project is an initiative by NITC intended to help draw together and make available all the published data for both the governmental and public use. The targeted users include all the Nepal Government departments and organizations, private organizations working for Nepal Government, small and medium scale industrial organizations and personal users and research groups.

2.26 E-Government Master Plan 2006

Important development in the e-government is development of e-government master plan. In 2006, master plan has been developed with the help of Korean government's Korean IT Industry Promotion Agency (KIPA). The e-government vision formulated by this master plan for Nepal is 'The Value Networking Nepal' through

- Citizen-centered service
- Transparent service
- Networked government
- Knowledge based society

E-government mission statement is: Improve the quality of people's life without any discrimination, transcending regional and racial differences, and realize socio-economic development by building a transparent government and providing value added quality services through ICT.

Eight priority projects chosen were building groupware systems for government, government portal, national identification, e-education, communication network, enterprise architecture, Public Key Infrastructure (PKI) and integrated data center. The priority projects were

selected with the following considerations. The strategy for the Nepali e-Government starts from the computerization and informatization of the central governmental processes, which should be gradually spread to the local governments. Building infrastructure and assuring contents should lead to bridging the digital divide. e-Education facilities can be used for the eradication of computer illiteracy in rural area.

The consulting team believes that through international cooperation and the collaboration between the government, academia and industry within Nepal, Nepal will successfully implement the e-Government project and become an IT power country.

The main goal of this project is to achieve good governance and social and economic development by establishing effective, systematic, and productive e-government. The master plan was supposed to comprise the following four points to achieve the goal.

- Establishing the vision, strategy and framework
- Selecting major projects and drawing the roadmap
- Defining direction of the execution organization
- Defining direction of restructuring legal framework

Establishing the e-government master plan is a long term project, which requires more than 10 year period. However, in order to reflect the dynamic development in the ICT sector and to establish a realistic plan, it is better to shorten the project period and to make periodic modifications to the plan to reflect new developments and trends in ICT. As such, the project period is set for five years, from 2007 to 2011.

2.27 IT Policy 2000 Nepal

The government of Nepal selected IT industry as the top priority for development and established IT Policy 2000 to consolidate the foundation for national economic growth and better living-standards for the next five years starting from the year 2000. The government planned to concentrate in the IT sector to provide fast development opportunities for other industrial sectors such as education, health, agriculture, tourism, and trade. It would also complement Nepali weakness in having unevenly distributed population across its geographically long-stretched country. Therefore, the government set the vision as “To place

Nepal on the global map of ICT within the next five years” and worked to attain the following. In accordance with the IT Policy 2000 strategies, the government acts as a promoter, facilitator, and regulator of the IT sector and follows a single-door system for the development of IT industry. National Information Technology Development Council, which decided on the national IT policies with the Prime Minister as the head of the council and ministers as its members were organized. Also, other organization such as the National Information Technology Coordination Committee in charge of IT research and HR development, and the National Information Technology Centre in MoST to promote informatization of the nation were established.

The policies to be promoted include enhancing administrative efficiency through digitalization, and implementing an open administration system through websites and Internet connection, and developing Nepali art culture and rural areas by developing Internet contents. Especially, a plan was set to strengthen underdeveloped areas by promoting e-commerce, e-education, and e-health. In line with these policies, it is necessary to lay the foundation for government officials to have access to the Internet and personal computers, as well as digitalize internal administrative processes.

Several action plans are devised to encourage and sustain IT development through the upbringing of specialists such as installation of computer education programs in middle schools, provision of computer facilities to support the education of experts and specialists with bachelors and masters degrees in universities (“Computer education to all by 2010”) and promotion and support of domestic and foreign training and education for IT sector. It is necessary to develop appropriate and diverse education and training programs for the schools and academies, and furnish an environment where experts and specialists can remain working in Nepal for the sake of accumulating knowledge and experience.

It has not been easy to establish ICT infrastructure due to Nepali geographical disadvantages such as elongated territory from East to West, altitude difference between the South and North and uneven population distribution. Thus, only 4% of the population uses telecommunication services. Taking this into account, the development of rural areas has been set as the priority policy. It is necessary to devise a measure to promote the usage of IT services as well as to build high-speed network in highly-populated areas. IT expansion strategies were adopted to provide Internet facilities to all Village Development Committees of the country in phases and to develop IT park in various places with the private sector.

2.28 Research Gap

From the review of literatures, it was found that no empirical research of this type was conducted before. No such research papers were found which are primarily focused to evaluate the e-government initiatives of the public sector organizations of Nepal. More specifically there are no papers which are related to evaluation of the e-government initiatives and its impact on the government service delivery process municipal organizations and ministries of Nepal. The international research papers were reviewed particularly for the emerald websites.

There are some article written in the field of e-government in Nepalese national publications however most of them are conceptual and theoretical papers reflecting the view of the authors based on the existing theory, which are far from the ground reality of the Nepalese public sector organizations. Even though several attempts were made by municipalities and ministries to established e-government services particularly with the help of funding of donor organizations, however those attempts were not consistent and most of them have ended their impact on completion of the projects. No empirical research work was found which have been used to evaluate the e-government initiatives.

Hence researcher found a gap in the Nepalese research field to evaluate the e-government initiatives and its impact on the service delivery process. An attempt has been made to fill the gap.

CHAPTER 3: RESEARCH METHODOLOGY

This chapter has described the research methods used to conduct this research work. As proposed in the introduction chapter one, survey and collection of primary data from various public organizations and reporting the finding is the major objective of this research. To achieve the objective a research plan was made and used to collect, analyze and report the findings.

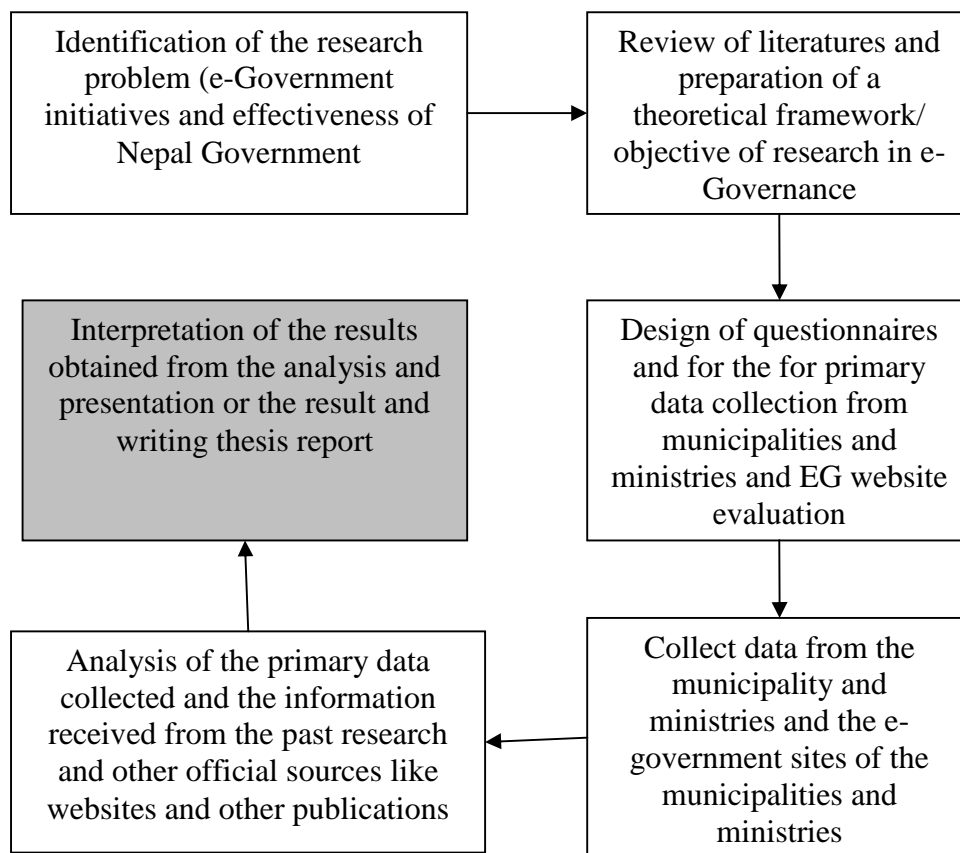
As we know that e-government is the use of information and communications technologies (ICT) to transform the traditional government to make it more accessible, transparent, effective and accountable. E-government plans and programs have been implemented from time to time in Nepalese public organizations. E-government plan is also a focus of national plan of Nepal. In this context, objective of this research is to evaluate e-Government initiatives of Nepalese public organizations with its focus on quality of e-government web-portals of Nepalese Public Organizations, strategic initiatives of public organizations on e-Government implementation based on e-Government change model, perception of the respondents on e-government initiatives and effectiveness.

Large numbers of literatures were reviewed and important finding have been documented in the previous review of literature chapter. Important variables as suggested by various research papers and models which found to be more relevant to this study have been used as basis to develop the questionnaires of the research. In this background this chapter has described the sampling methods used to collect the primary data, basis of selection of public organizations, data gathering procedure, variables of observations and scale of measurement have been defined this chapter. Additionally the major tools and techniques of data analysis identified and described in this chapter.

3.1 The Research Design

This is an exploratory type research which involves both reviews of existing literatures and survey in the field with set of structured questionnaires to find the factual as well as opinion. In general, research process followed has been described in the following flow diagram

Figure 3.1 The Research Design



3.2 Sources and Types of data

Major sources of the literatures reviewed were downloaded from the websites and particularly <http://www.emeraldinsight.com>. Websites of ministries of Nepal government, national planning commission and municipalities, central bureau of statistics were reviewed to collect secondary information.

Direct interview by the researcher being at the concerned offices were made to collect the primary data with the structured questionnaires. The offices of the primary data sources were the municipalities within the Kathmandu valley and ministries of Nepal government.

Other data sources for the study were be as follows

1. Primary data collected from the municipalities
2. Previous literatures in e-Governments from national and international websites
3. Various government department ministries and other office literatures available in their web sites

The scale of measurement will be ordinal and nominal type qualitative data. Both the qualitative and quantitative have been collected. User perception has been collected on five point likert scale where appropriate as designed on the questionnaires.

3.3 Population and Sample

Municipalities as the public organizations which are entitled for offer e-government services and ministries and district administration offices which are supposed to provide e-government services to general public are the government entities of study. VDCs have implemented e-government services so total population of study is 58. At least 12 (20 %) municipalities were visited out of the 58 municipalities

3.4 The Sampling Procedure

Data collected from local government offices i.e. municipalities and some of the district administration offices and from the ministries of Nepal governments. Convenient type of data sampling technique was adopted. Municipalities were selected from within the valley some municipalities from the western region and some municipalities from the central region of Nepal.

The first municipality to implement e-government successfully has been referred to Bharatpur Municipality in Chitwan which has been more closely observed with repeated

visits. Also the stakeholders hosting the websites of the municipalities were contacted to understand the more detailed situation of the present e-government status.

Regarding cost time and sophistication of the information, convenient sampling with central and mid western region of Nepal has been considered as sampling area for the data collection.

3.5 The Data Gathering Procedure

The information or data includes both primary and secondary. For both primary data and secondary information, researcher visited himself to the field i.e. municipalities, district administration offices, and ministries or their web sites.

For primary data, researcher personally visited the field with questionnaires and filled with discussion with the senior officers of the municipalities or the district administration offices as far as possible so that more reliable response could be received. During data collection period the researcher was in direct interface with the respondents and clearly explained the objective of research and something about the e-government so that better quality information could be obtained.

After visiting some district administration offices further visit was canceled because the scenario of most of the district administration offices were same and major decision maker of the district administration offices regarding e-government were the central ministry rather than the district administration office itself.

To evaluate the e-Government initiatives of the Federal Government, ministries are more important regarding the policies and plans in the implementation of e-Government. District administration office were simply follow the instruction from the central ministries so there is

Another research objective is to evaluate the websites of the ministries, district administration offices and municipalities. Municipality web sites and ministry websites are the portals of e-government service delivery. Researcher visited the websites of all the ministries and municipalities personally to evaluate the quality of web sites based on the indicators identified on review of research literatures of quality e-government service portals.

3.6 The Statistical Procedures

Descriptive analysis for frequency analysis, descriptive diagrams has been conducted to see the presence of the factors that support e-government implementation and its strategic effectiveness. To test the reliability of the data collected Cron Batch's Alpha analysis was made. Further correlation analysis of the data collected was made to see the inter-relationship of the variables.

First dependent variable is the quality of e-government service portals which are the web sites offering e-government services. To measure the quality and effectiveness of the e-service portals various indicators of measure are online services, online databases, audio and video clips, site attractiveness, security features, user friendliness, FAQs, search facility, downloadable forms, no of services offered are used as independent indicator of measurement. Total score measures from the individual scoring of different items has been used to evaluate the effectiveness of the web sites. Total score of the particular website would indicate the quality and effectiveness of the e-government portals.

Further a survey was made to measure the perceptions on the barriers of particularly the senior officers of the municipalities to collect their perception about the barriers e-government implementations and its effectiveness.

3.7 Respondents Profile

The entire respondents selected were from government offices and currently government employed. Majority of the officers selected were senior in their role and having some idea on e-Government so that they can better respond as far as possible and provide more strategic information and reflect the view and plan of the organization. Age of the respondent distributed from 29 years to 56 years having majority of respondents around 40s. 85% of the respondents were male while 15% were female respondents.

All the respondents were having bachelor and master's degree certificate i.e 78% of the

respondents were master degree or more qualified whereas 22% of respondents were having bachelor degree holders, which reflects that the respondents of this research were more educated groups and information received is more relevant in Nepalese context.

Most of the data collected organizations are municipalities and ministries as they are the prime implementer of e-governance at the moments. 90% of the respondents use internet either at home or office for their business or personal use. Only 3% of the respondents use Internet at home only whereas 39% of respondents use internet at office only. Similarly respondents who use internet at home and office is 44%. The data show that of the users use internet available at office. Majority of the respondents or the office users have either intermediate or basic level majority of computer knowledge with which they simply can use office application and use computer for email and internet. 70% of the respondents say that they have idea about what e-governance means whereas 30% say that they do have no idea about e-government services.

3.8 Data analysis tools used

Following data analysis and report writing tools were used in course of conducting this research study. Personal Computer was used to analyze the data collected from the survey with application software SPSS 13.0, Excel 2007, Word 2007.

CHAPTER 4: DATA ANALYSIS AND PRESENTATIONS

In this chapter, the data surveyed has been analyzed and described. National policies and programs have been reviewed and presented. Other information based on previous literatures and documents and review of projects related to information communication technology (ICT), and project reports have been reviewed and finding have been presented in this chapter. The current states of e-government were analyzed by studying documents, surveys and interviews.

Evaluation and presentation of websites of the organizations entitled to provide e-government services are the major service delivery portals. All the websites of municipalities which were published were reviewed and evaluated to see the quality of the websites based on the indicators or the variables as identified in the review of literature section. Further correlation of the some important variables have been identified and described.

Regarding the impact of e-government in the Public Organizations set of data were collected to see the effect of e-government in the public organizations. No organizations were fully in position to be fit for evaluation for the impact of the e-government because no organizations have fully implemented their services and have practice of monitoring and evaluation practice to see in the result of the e-government. As such a survey was made from the officials (who were the respondents of this survey) to express their opinion based on their knowledge, experience and expectation if the e-government system were implemented.

4.1 Policy and Programs on e-Government

The government of Nepal selected IT industry as the top priority for development and established IT Policy 2000 to consolidate the foundation for national economic growth and better living-standards for the next five years starting from the year 2000. Nepal government set the vision as “To place Nepal on the global map of ICT within the next five years” and worked to attain the following. In accordance with the IT Policy 2000 strategies, the government acts as a promoter, facilitator, and regulator of the IT sector and follows a single-door system for the development of IT industry. National Information Technology Development Council, which decided on the national IT policies with the Prime Minister as

the head of the council and ministers as its members were organized.

The policies to be promoted include enhancing administrative efficiency through digitalization, and implementing an open administration system through websites and Internet connection, and developing Nepali art culture and rural areas by developing Internet contents. Especially, a plan was set to strengthen underdeveloped areas by promoting e-commerce, e-education, and e-health.

Thus, only 4% (e-government master plan, 2006) of the population uses telecommunication services. Taking this into account, the development of rural areas has been set as the priority policy. It is necessary to devise a measure to promote the usage of IT services as well as to build high-speed network in highly-populated areas.

4.2 National Initiatives in the e-Government

As published in the official website of Ministry and science and technology, e-Government, Tele-Center, and Databank have been priority area or the focus area of National Information Technology Center (NITC). NITC with support from Korean International Cooperation Agency (KOICA) and HLCIT has prepared national e-governance master plan that has defined practical vision, architecture, infrastructure required, e-government framework, policies, standards and procedures for IT governance and decision making (NITC, 2008)

There are 43 Tele-Centers in different districts throughout the country which were established and managed by the NITC or the HLCIT or in support from different donor organizations like the KOICA, UNDP. This is important step towards infrastructure development that vital important for the success of e-government initiatives Objectives of Tele-Centers are to maximize use of ICT, provide internet access to rural community, develop knowledge based society, provide information related to agricultures, tele-medicine, and search study and employment opportunity. The approach to Tele-center initiated in order to shrink the Digital Divide. In general, through the concept of Tele-center, it is aimed to provide the deficit community with the ease of modern Information technological services such as internet, email, fax, photocopy, scan etc in order to help them reach the realm of development.

National Data Bank project is an initiative by NITC intended to help draw together and make available all the published data for both the governmental and public use. The targeted users include all the Nepal Government departments and organizations, private organizations working for Nepal Government, small and medium scale industrial organizations and personal users and research groups.

These developments are important regarding the infrastructure need of the e-government

4.3 Website Evaluation Findings

As we know that e-government services are primarily provided through internet or intranet websites. As such, government websites are prime e-government service delivery channel. Quality of the websites is one of the important factors behind the effectiveness of the web services offered by any public organizations. Here 33 different public organization’s websites have been evaluated based on the various variable of quality measurement of public websites. Such variables comprises online services, online databases, audio clips, video clips, up-to-date of information on the websites, user-friendliness, site attractiveness, FAQs, downloadable firms, security features, downloadable firms, credit card facility, motivation for use of services, disability access, web-personalization, job application facility, job notice, digital signature for transactions etc.

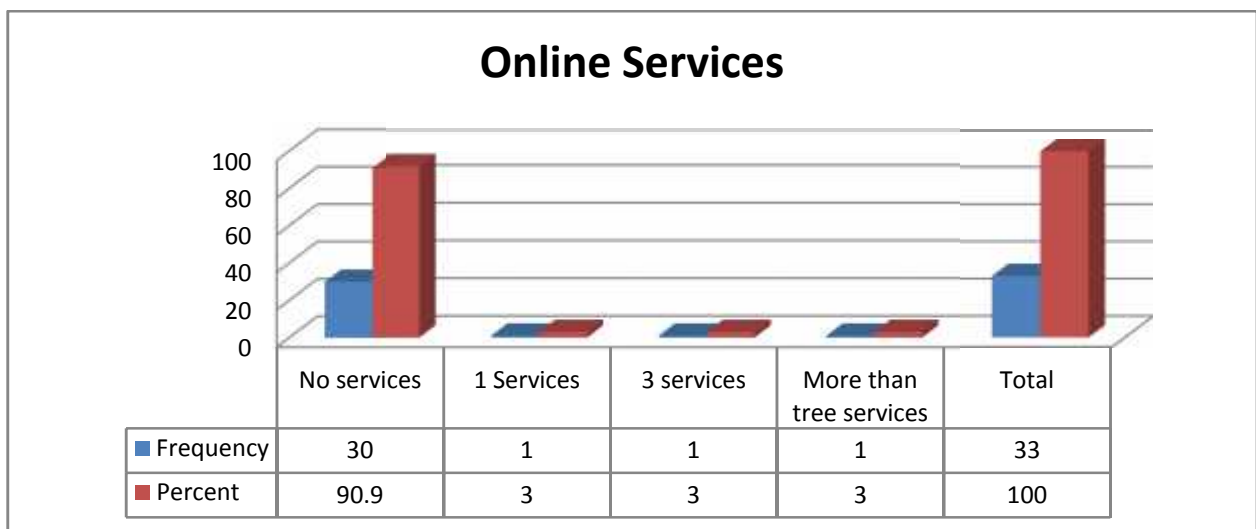


Figure 1: Online Services

Reliability of the data collected was tested using Cronbctch’s Alpha Test. The value of Cronbatch’s Alpha is 0.855 which indicates that the data are reliable based on the Cronbatch’s Alpha vaue. Test Reliability Statistics shows that the data are valid and in the

accepted region.

Online services are interactive portals where citizens can apply for some services and get it done online normally without being in direct contact with the officials actually offering the services. As such online services are the major indicators of the e-government websites showing its effectiveness in offering online services. Researcher has also included the websites of Nepal telecom which is not actually complete non-profit public services. Remaining are municipalities and ministries of Government of Nepal. When the public websites were examined only 9% of the public web services found to have offered online services. That is also including Nepal Telecom which is no more a government organization. Regarding municipalities Bharatpur Municipality was only municipality to offer online serves for vital information registration services. However, present situation of Bharatpur municipality regarding e-government services were measurable. Site has not been regularly updated and there is not strong commitment from the management site to make it more effective. Municipality has not kept this service in priority program. Commission for the Investigation of Abuse of Authority (CIAA) has recently started its online services to the citizens where citizens can apply online complaints, see progress and follow up the cases without completely being out of contact with the CIAA.

Online databases services comprise collection of online comments, registrations, other simple surveys of citizens etc. About 60% of the websites have maintained online databases in their websites. Majority of the online database collected public organizations. Further audio clips and video clips part information dissemination foe e-government sites. Nearly 90% of the websites do not have maintained such audio and video information in their websites.

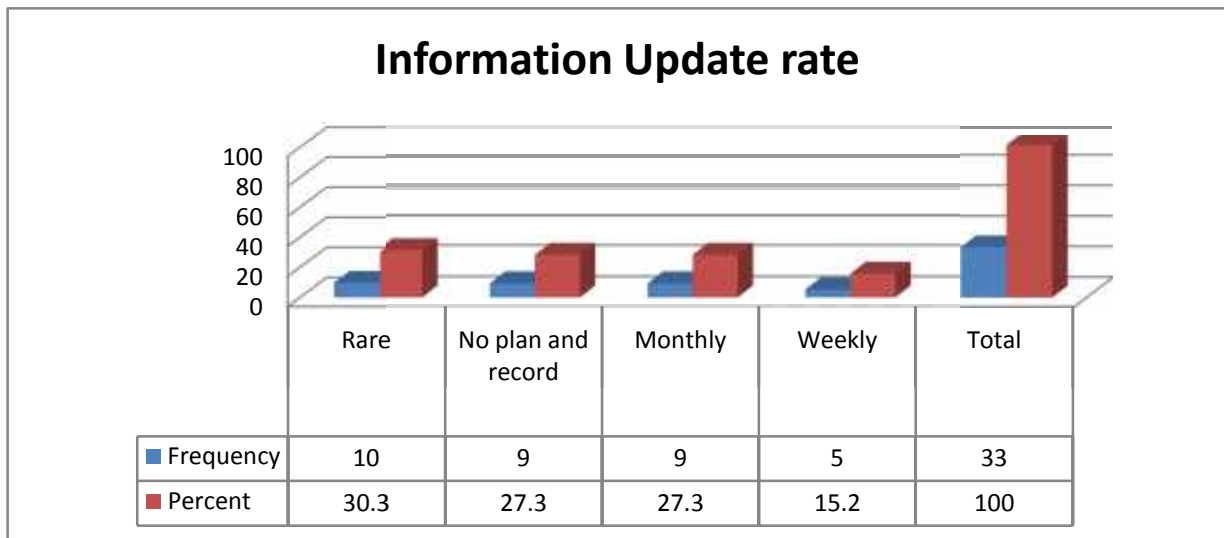


Figure 2: Information Update Rate

Information update rate is another important quality of the websites. Most of the websites of Nepalese public organizations are stall and non-updated. The survey show that majority of website update rate is very rare. 30% of the websites have very rare update rate whereas 28% of the websites are have no plan to update websites but updated as when necessary similarly nearly 27% of websites updates their information in monthly rate whereas only 15% of e-government websites are updated weekly. Some of the public websites were found to have published the job notice for job vacancies which were seen in the website even after months of filling the position. Many municipality websites seems to have developed, published and forgotten which were never updated.

More that 50% of the websites have average or below average attractiveness whereas 25% of the respondents say that site are not attractive. Attractiveness is measured for the effectiveness of the websites for its ability to retain the viewer for longer period of time giving them interesting information and easiness to find information. Further aesthetic quality of the site is also considered as on of the factor of overall site attractiveness. As there is not such definite measurement standard and indicators to evaluate this factor, researchers and other professional's view were averaged to find the overall attractiveness of the websites.



Figure 3: Security Features

Security of the e-government websites is an important feature which indicates the reliability of the government websites. Majority of the respondents claim that their e-government sites are secured against any intruders and the content in the website are safe and secured, however it was difficult for the researcher to indentify the level of security maintained. One interesting incident happened during this research period regarding the security of public websites. Most of the websites of the ministries were down due to security problems because some intruders destroyed the sever hosting the WebPages of the ministries. This indicates that Nepalese public websites are not safe against intruders even though majority of the owner claim to have their websites secured. Similar incidents had happened few years back in case of Nepal police website.

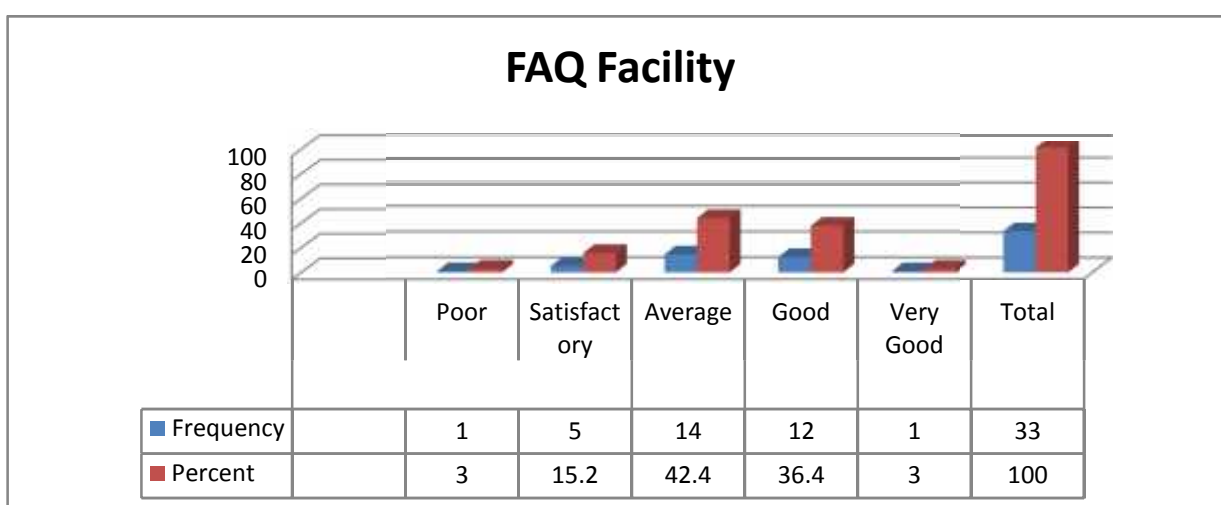


Figure 4: FAQ Facility

Majority of the public organization WebPages reviewed have no attractive FAQ quality. Majority of the FAQ facility were evaluated as average whereas i.e. 43% whereas the 36% of the websites were found to have good FAQ facility available in the websites. FAQ facility is regarded as one of the important features as most of the common queries of the general public are found in this section of the websites.

Good e-government websites are expected to respond over the public queries in time. Similarly the responses over the general publics query were also found to be poor with the Nepalese public web sites. When reviewed 52% of the websites were found average whereas about 36% of the websites were found below average in query and response. This indicates that Nepalese e-government websites have not developed professionalism in managing the WebPages.



Figure 5: Security Features

Majority of the ministries and municipality websites are found to be user-friendly by the researcher i.e. users have no difficulties in finding the information sought for. 46% of the WebPages were ranked as good in the user-friendliness whereas 40% were reported as the average in this feature. Another important feature of the public organization's program is motivation for the user of internet services. Changing the people's habit to use technology is not an easy task. Motivation is an important factor which attracts general publics to use the e-government services. Most of the e-government websites found to have no specific motivational programs expect Bharatpur Municipality which offered attractive motivational

programs during inception phase of the launching of the websites. Such motivational programs included like Were taking less or no office charge for those who take services online through websites of the municipality however such motivation continuity could not be observed in the management of e-government services at present. Most of the e-government programs have been sidelined with the change in the management. As such 80% of the public organizations have less motivational programs or average whereas only 18% of the websites were found to have motivating the users to use their users.

Most of the web sites have maintained downloadable forms. 80% of the websites reviewed were found to have maintained the forms which other wise the public had to go to office to collect it or had to purchase it. Additionally some useful documents of public interest are also maintained in the websites which can be regarded as the preliminary symptoms of the e-government services. At this point Nepalese public websites have maintained standard in this point. Additionally most of the WebPages were found to have maintained to collect the comments online. However, effective management of the complaints received was not found.

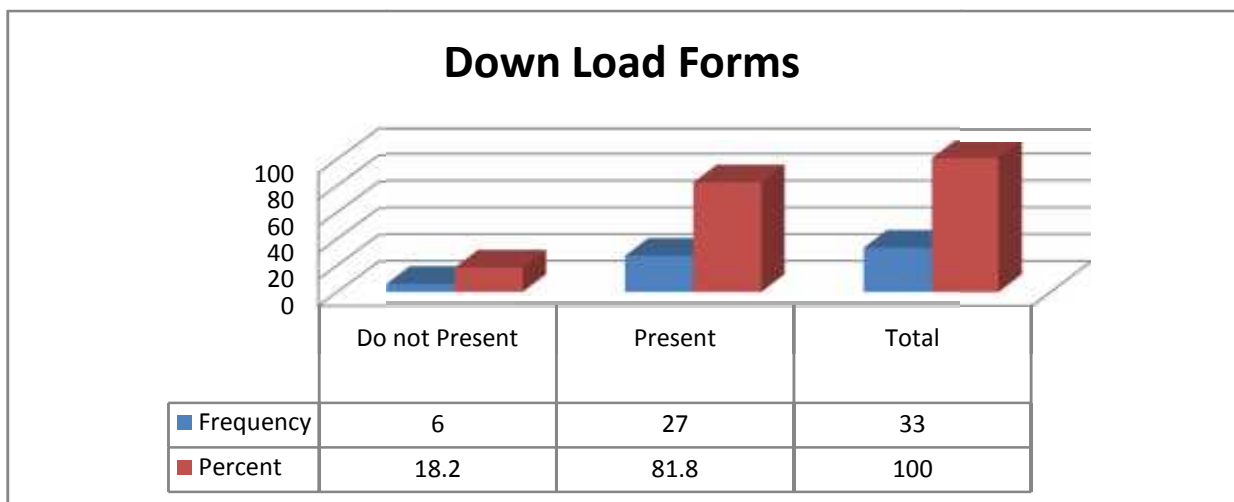


Figure 6: Download Forms

Other important e-government services that are expected in standard e-government websites like credit card payment system, web personalization, digital signature, disability access, are not maintained in any of the e-government websites reviewed by the researcher. Some of the organizations like ministries found to have published their notice in the websites however

application job online were not provisioned in the websites as an e-government services.

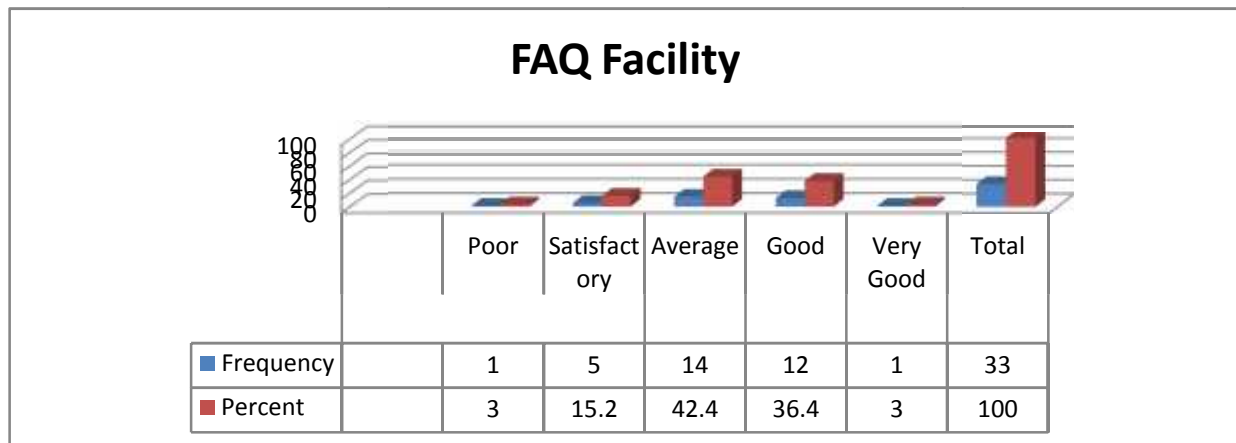


Figure 7: FAQ Facility

The summary statistic of evaluation of the online services shows that majority of the services offered by the public organizations have means below the average values as expected. Online services, online database, online audio clips, online video clips are very limited with the Nepalese public organizations with mean values below 2.0 which indicates poor quality. Site attractiveness, Security features and FAQ facilities have their mean value slightly above average with mean values 3.12, 3.42, 3.21. Further majority of the websites have online downloadable forms and information with average mean value of 4.27 and online comment form with mean value of rating as 3.54. Other features like web personalization, digital signature, disability access, job application facility, job notice, email registration facility are rarely available which have mean value 1, the minimum possible value in the quality rating. This way in summary the Nepali websites have average quality in some features whereas majority of quality features have below the average mean level.

Table 1: e-Government site evaluation

	N	Mean	Std. Deviation
DownLoadForms	33	4.2727	1.56670
OLCommentForm	33	3.5455	1.95402
SecurityFeatures	33	3.4242	.75126
UserFrendlySite	33	3.3333	.88976
FAQFacility	33	3.2121	.85723
SiteAttractiveness	33	3.1212	1.02340
QueryAndRespFacility	33	2.6667	.81650
Motivation	33	2.5152	1.14895
Info Updat Rate	33	2.2727	1.06867

Online Databases	33	2.0000	.96825
Online Audio Clips	33	1.2727	.87581
Onlin Services	33	1.2424	.86712
JobNotice	33	1.2424	.96922
EmailRegFac	33	1.2424	.96922
Vedio Clips	33	1.2121	.73983
JobAppFac	33	1.1212	.69631
CreditCardPmt	33	1.0000	.00000
WebPersonalizatioin	33	1.0000	.00000
DigSigFac	33	1.0000	.00000
DisabilityAcces	33	1.0000	.00000
Valid N (listwise)	33		

Following table indicates the correlation among the variables considered for evaluation of the Nepalese e-government websites. Online services and online data base seems to be highly correlated. Additional online video and audio seem to be correlated with the online services which seems to be significant at 10% with two tailed test with correlation values as .843 and .692 respectively. Online audio and videos are also correlated with correlation coefficient of .776. Information update rate and online services are correlated with correlation factor .554. Site attractiveness is correlated with majority of the features of the websites with correlation factors from .38 to .40.

Table 2: Correlation among the variables

Correlation variables	Online Services	Online Databases	Video Clips	Online Audio Clips	Info Update Rate	Site Attractiveness	Security Features	FAQ Facility
Online Services	1							
Online Databases	.335	1						
	.057							
Video Clips	.843(**)	.480(**)	1					
	.000	.005						
Online Audio	.692(**)	.442(**)	.776(**)	1				
	.000	.010	.000					
Info Update Rate	.162	.544(**)	.241	.419(*)	1			
	.366	.001	.177	.015				
Site Attractiveness	.388(*)	.378(*)	.378(*)	.380(*)	.397(*)	1		
	.025	.030	.030	.029	.022			
Security Features	.173	.344	.114	.009	.202	.622(**)	1	
	.336	.050	.527	.962	.260	.000		
FAQ Facility	.181	.527(**)	.124	-.079	.037	.326	.584(**)	1
	.314	.002	.492	.660	.837	.064	.000	

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Additionally, the FAQ facility is correlated with security features and online database with correlation factor .584 and .527, which indicates that those sites which have better looks are offering better online services and also have better security positions.

4.4 Findings on e-Government Change Outcomes and Performance Gains

Assessment of performance gains due to e-government implementation was evaluated with 5-scale likert scale. Non of the government websites were found to have implemented e-government services in full fledged scale so that we can evaluate for the impact evaluation, hence opinion has been collected on the basis of assumption of the respondent about the expected outcome and performance gains of the e-governance services.

As per the survey, 92% of the respondents agree that e-government service implementation raise the quality of the public service delivery. Almost 100% respondents agree that implementation of e-government services saves time. Further 88% of respondents say that implementation of e-government saves manpower i.e. less employee can deliver better and more services. Similarly

56% believe that it saves costs whereas 36% have doubt that e-government services saves cost. All the respondents disagree that present level of e-government service delivery meet the public expectation. 60% say that service is not adequate whereas 28% has doubt on quality of level of services.

Almost 92% of the respondents agree that e-government brings flexibility in the work whereas 76% agree that e-government service standardize the office work. Most of the public organizations do not care about whether the citizens are satisfied with their services or not. There is no practice of measuring feedback in public organizations however some of the respondents claim that they take feedback from the citizens during meetings or gatherings with stakeholders or other citizens.

This summary statistics shows the impact of e-government in the service delivery functions of the governments. As it has already been stated that Nepalese Public Organizations, particularly, the municipal local governments and ministries of government of Nepal are not in position to evaluate the impact of e-government in public service delivery in the organizational performance and measuring the citizen's satisfaction level. However, the

survey is based on the opinion rather than the actual experience of the e-government initiatives and its impact on the performance.

Most of the respondents either believed or experienced that e-government raise the service in the public service delivery. The mean of the response is 4.48 in maximum of 5 point which indicates that employees believe that e-government service raise the quality of the service delivery. Similar is the opinion that e-government saves the time and manpower in the service delivery process which has 4.6 and 4.32 mean value respectively. Respondents are also optimistic that e-government will save operational cost and raise satisfaction of the citizens which has mean value of response as 3.72 and 3.56 respectively. Respondents agree that present e-government service delivery neither has meet the public expectation level nor exceed the expectation which has been expressed opinion by mean value 2.72 and 2.44. Further respondents believe that e-government services brings flexibility in the work and government work is more standardized due to the introduction of the e-government service delivery which have mean values 4.3 and 4.2.

Table 3: Outcome and Performance gains

Variables	N	Minimum	Maximum	Mean	Std. Deviation
EG Implementation saves time	25	4.00	5.00	4.6000	.50000
EG has raise quality in government service delivery	25	3.00	5.00	4.4800	.65320
EG saves manpower	25	3.00	5.00	4.3200	.69041
EG Services brings flexibility in the works	25	2.00	5.00	4.3200	.74833
EG Standardize the work	25	1.00	5.00	4.2000	1.22474
EG saves the operational cost	25	2.00	5.00	3.7200	.93630
Citizen's satisfaction raised	25	1.00	5.00	3.5600	1.15758
EG has Exceed citizen expectation	25	1.00	5.00	2.7200	1.17331
EG Services meet public expectations	25	1.00	4.00	2.4400	.82057
Stakeholders are regularly surveyed	25	1.00	4.00	1.7200	.97980
Valid N (listwise)	25				

However the public organizations have no practice of measuring the stakeholder's satisfaction level after introduction of the services which has indicated by the values.

This way the survey of data shows mixed result regarding the effectiveness of the e-government initiatives of the Nepalese public organizations. The main idea behind this study shows that there is little development in the e-government implementation side of the Nepalese public organizations even though we have heard lot on development and implementation of optimistic e-government plans regarding implementation of information technology in the public organizations. This research has revealed an important fact that e-government was very little reach to the publics so that they could enjoy the benefit of technology. However there are lot of good points in the management for change management and interest of most of the organization in implementation of the information technology and launching of e-government services in near future, however close examination of the organization does not support their claim with their sustainable and long term plan and budget

Table 4: Barrier variables if e-Government

Barrier variables if e-Government	N	Mean	Std. Deviation
Lac of computer knowledge	25	4.40	.764
Lac of awareness	25	4.12	1.013
Lack of internet access	25	4.00	.957
Could not afford internet	25	3.72	1.275
Generation gap	25	3.48	1.194
Non user friendly website	25	3.12	.833
Language	25	2.64	1.036
Security fear	25	2.52	1.388
No trust on web content	25	2.20	1.323
Valid N (listwise)	25		

The absence of a strong commitment to bring citizens, politicians, bureaucrats and IT experts together is a serious obstacle in modernizing bureaucracy in Nepal. Technological, managerial and financial factors also impede these reforms. They include: lack of proper infrastructure; low level of IT literacy; lack of coordination at all levels; lack of proper training; non-implementation of IT policy; lack of sufficient funds; and lack of political stability. (Sukla, 2003)

4.5 Major Findings

Based on the data collection and various analysis done so far, following major finding are as following.

1. As per the NITC, and RUPP there are 40 tele-centers which are well functioning which is a major program to reduce digital device. Such an indication could be seen in the Kantipur Newspaper (December, 2008, Page-12) which has given news with heading Computer Learning Interest of Mothers from a newly established the tele-center. However, the study show that e-Government impacts have very little reached public organizations
2. 40% of the respondents do not believe that e-government will be successful in Nepal whereas significant respondents say that they could not give any definite opinion in this regard.

E-government services are primarily provided through internet or intranet websites. As such, government websites are prime e-government service delivery channel. Quality of the websites is one of the important factors behind the effectiveness of the web services offered by any public organizations. On evaluation of the websites following conclusions were made.

1. The study has revealed that most of the websites that were supposed to offer e-government services were quite incomplete, stall and not updated and not with focused aim. No organizations are found to be very much serious about neither in the quality and content
2. Most of the websites are not attractive enough to retain the citizens or the website users for longer time. E-government sites do not seem to be considered the users while designing the websites. As such the websites does not seem to be user centric in design but published to meet the formalities
3. Majority of Nepalese websites are designed to deliver static and information only and very few are designed to deliver online e-government services. The first municipal e-government service was started by the Bharatpur municipality however it has not been continued to its original spirit at this moment.

4. Quality is decreasing compared to previous years as per the published literatures. In a survey made by the by Darrell M. West, in Global E-Government, E-Government Country Rankings, 2007 Nepal has fallen down to 108th position from its 60th position in the year 2006 whereas the neighboring countries India has raised from its 77 to 47th position and China from 76 to 51th position.
5. Only limited number of municipalities and majority of ministries have websites whereas most of the district administration offices do not have websites for e-government services delivery.
6. E-government programs and services are not given high priority by majority of the Nepalese public organizations. Organizational heads were found comparatively less interested as well as having less knowledge in the in e-government issues, potential and scope. There are hardly any ICT units equipped with the well trained technician in full fledged e-government activities. Majority of ICT units are led by below officer level staffs which indicate that organizations are not paying higher priority for the e-government implementation at this point of time.
7. More advanced e-government services are nil in the websites of municipalities and ministries like online payments, disability access, job application, email registration facilities. Main objective of Nepalese public websites is to disseminate static information rather than the online services.
8. There is no motivation programs to the citizens to use the e-government services, however during early days of e-government implementations, Bharatpur Municipality has implemented a good motivational programs like waiving services charges for the individuals who use the e-government services.
9. The correlation table indicates that the site attractiveness is correlated with many other quality features of the websites like FAQ, online services, security features, user-friendliness information update rates etc. As such it could be concluded that quality websites are attractive to look as well. Further it justifies the validity of the data.

One of the objectives of the research was to assess the e-Government Change Outcomes and Performance Gains. Following are conclusions drawn from the survey based on the opinion of the respondents.

1. Most of the respondents believe that the introduction of e-government service increase the

quality of the public service delivery in our context, Almost respondents agree that e-government brings flexibility in the work and e-government service standardize the office work.

2. Survey indicates there is not doubt that e-government raise the service in the public service delivery. The mean of the response is 4.48 in maximum of 5 point which indicates that employees believe that e-government service raise the quality of the service delivery. Similar is the opinion that e-government saves the time and manpower in the service delivery process which has 4.6 and 4.32 mean value respectively.
3. Respondents are also optimistic that e-government will save operational cost and raise satisfaction of the citizens which has mean value of response as 3.72 and 3.56 respectively.
4. Survey shows that present e-government service delivery neither has meet the public expectation level nor exceed the expectation which has been expressed opinion by mean value 2.72 and 2.44.
5. Study indicates that e-government services brings flexibility in the work and government work is more standardized due to the introduction of the e-government service delivery which have mean values 4.3 and 4.2.
6. However the public organizations have no practice of measuring the stakeholder's satisfaction level after introduction of the services which has indicated by the values. Most of the public organizations do not care about whether the citizens are satisfied with their services or not. There is no practice of measuring feedback in public organizations however some of the respondents claim that they take feedback from the citizens during meetings or gatherings with stakeholders or other citizens.

It is possible that it is still too soon to evaluate the full effects of e-government initiatives on service orientation in the public sector. (Akesson, Skalen, & Edvardsson, 2008). Overall conclusion of this study is similar to that of Akessons's finding that largely positive predictions suggested by the literatures regarding the potential benefits of e-government from a conceptual perspective have not been supported by empirical research. The websites are just in initial phase and not in position of evaluation.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

This research work aimed at studying the e-government approach of Nepalese Municipal organizations through examining the websites of the organization as service delivery channel. This research was surveyed to evaluate the three main components of government initiatives and its effectiveness. The three main components were examine the e-Government Change Environment, e-Government Change Management practices, e-Government Change Outcomes and Performance Gains. In this chapter conclusions have been drawn from the finding of analysis of data surveyed in the chapter three as well as from the review of documents on e-governments.

5.1 Summary

Use of information technology in public sector seems to be widespread after introduction of information technology policy in 2000. The government of Nepal selected IT industry as the top priority for development and established IT Policy 2000 to consolidate the foundation for national economic growth and better living-standards for the next five years starting from the year 2000. NITC with support from Korean International Cooperation Agency (KOICA) and HLCIT has prepared national e-governance master plan that has defined practical vision, architecture, infrastructure required, e-government framework, policies, standards and procedures for IT governance and decision making. Eight priority projects chosen were building groupware systems for government, government portal, national identification, e-education, communication network, enterprise architecture, Public Key Infrastructure (PKI) and integrated data center. As published in the official website of Ministry and science and technology, e-Government, Tele-Center, and Databank have been priority area or the focus area of National Information Technology Center (NITC). There are 40 tele-centes already established in villages in remote areas.

Study shows that General publics have very little idea on knowledge of specific e-government system as well as the knowledge is very limited in the employees. Survey indicated that only 72% of employees of computer units have knowledge on e-government. Hence it could be concluded that awareness program is seriously lacking. Majority of organizations do not believe that the government has given sufficient effort to promote e-government services in the public organizations. Similarly,

5.2 e-Government Change Outcomes and Performance Gains

One of the objectives of the research was to assess the e-Government Change Outcomes and Performance Gains. Following are conclusions drawn from the survey based on the opinion of the respondents.

Most of the respondents believe that the introduction of e-government service increase the quality of the public service delivery in our context, Almost respondents agree that e-government brings flexibility in the work and e-government service standardize the office work. The mean of the response is 4.48 in maximum of 5 point likert scale which indicates that employees believe that e-government service raise the quality of the service delivery. Similar is the opinion on e-government saves the time and manpower in the service delivery process which has 4.6 and 4.32 mean value respectively. Respondents are also optimistic that e-government will save operational cost and raise satisfaction of the citizens which has mean value of response as 3.72 and 3.56 respectively.

Survey shows that present e-government service delivery does not meet the public expectation which has been expressed opinion by mean value 2.72. Study indicates that e-government services brings flexibility in the work and government work is more standardized due to the introduction of the e-government service delivery which have mean values 4.3 and 4.2.

However the public organizations have no practice of measuring the stakeholder's satisfaction level after introduction of the services which has indicated by the values. Most of the public organizations do not care about whether the citizens are satisfied with their services or not. There is no practice of measuring feedback in public organizations however some of the respondents claim that they take feedback from the citizens during meetings or gatherings with stakeholders or other citizens

5.3 Evaluation of web sites

The study has revealed that most of the websites that were supposed to offer e-government services were quite incomplete, stall and not updated and not with focused aim. No organizations are found to be very much serious about neither in the quality and content. As such the websites does not seem to be user centric in design but published to meet the formalities. Majority of Nepalese websites are designed to deliver static and information only and very few are designed to deliver online e-government services. The first municipal e-government service was started by the Bharatpur municipality however it has not been continued to its original spirit at this moment. Only limited number of municipalities and majority of ministries have websites whereas most of the district administration offices do not have websites for e-government services delivery. Main objective of Nepalese public websites is to disseminate static information rather than the online services. Bharatpur Municipality has implemented good motivational programs like waiving service charges for the individuals who use the e-government services. The correlation table indicates that the site attractiveness is correlated with many other quality features of the websites like FAQ, online services, security features, user-friendliness information update rates etc. As such it could be concluded that quality websites are attractive to look as well. Further it justifies the validity of the data.

E-government programs and services are not given high priority by majority of the Nepalese public organizations. Senior officers particularly in municipalities were found comparatively less interested as well as having less knowledge in the in e-government issues, potential and scope. There are hardly any ICT units equipped with the well trained technician in full fledged e-government activities. Majority of ICT units are led by below officer level staffs, which indicate that organizations are not paying higher priority for the e-government implementation at this point of time. However it is good point that most of the organization have established ICT units which is a sign of recognition of importance of information technology.

5.4 Conclusions

In summary, it could be concluded from the study that, in Nepal e-government is recently being initiated. This is not in stage where we can fully realize the effect of e-governance in the general publics. Most of the organization have initiated the e-government practices just as pilot project or as a fascinating service offered by their organizations. In past, even though there were some efforts made to implement e-government, those are limited in theory and practically, those project could not be evaluated very successful for example, Bharatpur Municipality. Even though ICT is said to be in high priority in by the planning level authority, this could not be found to be reflected in the local government level because this is not so in the municipal organizations.

The main e-government service delivery portal, organization's website, is limited to provide limited static information rather than online services however good point is that majority large number of municipality have at least initiated to establish websites. These websites have average quality in the beginning however continuous update and management is lacking. The websites management function has not given high priority so the contents of the websites are outdated and sometimes irrelevant. They are not managed as an important service.

In conclusion, e-government initiatives in Nepalese public organization are at very primitive stage and limited in very few organizations. Recently there are some initiatives taken from government side such as e-government master plan in line with IT policy 2000. Change management environment and e-government change management practices are in below average level to support the change. Most of the respondents believe that e-government system brings positive effects on the Nepalese Public Organizations.

5.5 Recommendations

1. The ultimate goal of e-government is to provide citizens with services. To this effect, **web-sites need to be well-designed, easy to navigate, and accessible to a wide variety of users.** This should be the first task of anyone in charge of an e-government. A site may have a multitude of great services, but if the pages are inaccessible and impossible to navigate, few users will be able to take full advantage of these services. (West, 2007).
2. **Sustainable technology implementation is important in public organization.** In 2006 Nepal's strategic direction of e-government was good but now it is going back and even implemented systems are not working. These are not a fit and forget systems but need continuous improvement and careful and critical management.
3. e-Government implementation components of most public organization were found very **weak in both management and technical side, so strategic plan, commitment and strong monitoring and evaluation mechanism should be developed.** This should be improved by top level management's commitment and strong technical units should be developed.
4. The e-government management **should be guided by the focused objective and strong Monitoring and evaluation and feedback system for assessing progress** and performance of management to draw attention involvement of top management.
5. Establish a system that assesses usage status after the completion of the project, compares performance against the original plan, and reflects the assessment result to the future projects.

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Web sites:

<http://www.emeraldinsight.com/Insight/menuNavigation.do?hdAction=InsightHome>

APPENDIXES

Questionnaire

Research topic: “E-GOVERNMENT INITIATIVES AND EFFECTIVENESS OF NEPALESE PUBLIC SECTOR ORGANIZATION”

(A) PERSONAL INFORMATION

Please check the appropriate one () or multiple options ()

Occupation <input type="radio"/> Students <input type="radio"/> Gov. Employed <input type="radio"/> Private Employed <input type="radio"/> Unemployed	<input type="radio"/> Retired <input type="radio"/> Self Employed <input type="radio"/> Looking after family <input type="radio"/> Farmers <input type="radio"/> Others	Qualification <input type="radio"/> Post Master <input type="radio"/> Master <input type="radio"/> Intermediate <input type="radio"/> SCL Pass <input type="radio"/> Below SLC
Age:	Sex: <input type="radio"/> Male <input type="radio"/> Female	
Address District: VDC:	Do you use internet? <input type="radio"/> Yes <input type="radio"/> No	
Do you have computer at home? <input type="radio"/> Yes <input type="radio"/> No	Do you have computer at office? <input type="radio"/> Yes <input type="radio"/> No	
Where do you use internet? Home Office Cyber Other places Not applicable	What for do you use Computer? Internet Email Word Excel PowerPoint Games Scanning photos Others	IT Skills <input type="radio"/> Basic <input type="radio"/> Intermediate <input type="radio"/> Professional <input type="radio"/> None
Do you know about any government services which are provided through internet? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Idea	Do you have mobile with you? <input type="radio"/> Yes <input type="radio"/> No	

(B) NEPALESE OFFICER’S PERCEPTION IN E-GOVERNANCE

Outcome and performance gains	Strongly Disagree	Disagree	I don't know	agree	Strongly agree
Quality of the service delivery has been raised after implementation of EG					
Time have been saved due to EG services					
Less manpower can do the same work after EG is implemented					
Cost have been saved by the EG services					
Citizen satisfaction have been raised					
EG services have exceed the citizen expectations					
EG services meet the public expectations					
EG has met the public expectations					
EG brings flexibility in works					
EG has standardize the services					
Stakeholders regularly surveyed to find the satisfaction level					

(C) WEBSITE EVALUATION

URL name:

Organization Name:

Evaluation of government websites delivering EG services					
e-government website quality indicator factors	How do you rate the website quality indicator factors?				
	0	1	2	3	4
Online services	None	1 service	2 service	3 service	>3-services
Online databases					
Online audio clips					
Online videos					
Information update rate	Rare	No Plans/Records	Monthly	Weekly	daily
Site attractiveness	Poor	satisfactory	Average	Good	Very good
Security features					
FAQ facility					
Queries and response facility					
User friendliness (feel easy find information)					
Motivation for citizens to use the websites (e.g. Less money for those who come through internet)					
Web search facility	Present	Do not present			
Downloadable forms					
Credit card payment					
Online comment form					
Web personalization					
Email address reg. facility					
Digital signature					
Job listing /opening notices					
Job applications provision					
Disability access					