Design and reality gap of the E-Government Policy within the Local Authorities, Sri Lanka

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Abstract

Information technology is transforming prevailing systems, procedures in Global level. Therefore, imaging trend is to transfer all the sectors to communicate digitally with the community. This development with the transformation makes great demands both on the IT systems on which e-government is based on work processes in the public sector. E-Administration is a versatile e-Platform for e-Government and can help to transform the lives of citizens on earth and create sustainable development.

Developing countries struggle to practice the e-government system. In Sri Lanka, provision of the services to the people through e-government is questionable. Implementation of the e-government is also successful or not? And how far the e-government system is user-friendly? According to the further studies of the challenges of the implementation of the e-governance system, it seems some of the researchers have explained about the failure of the e-governance system. The success of the e-government implementation is questionable. Therefore, this study has been examined the gap between the design and reality of the Sri Lankan context.

This paper consisted about the e-government policy, open source policy, various case studies on e-government policy practice and challenge when practicing the policy and new trend practicing in other countries namely open source soft wares, open governance. Data collected by based on questionnaires and interviews covered all local authorities in western province to identify gaps in both from the user side and designer side. The qualitative and quantitative analysis conducted using SPSS software to find out the gaps between design and reality.

Finally, the result identified the gap between the applicability of the e-government policy procedure high in the local government. Moreover, this paper illustrates the possibility to eliminate the identified gaps by using free open source software and open source software policy. This research will be useful to the Local Authorities to overcome e-government implementation barriers. Further, this can be incorporated to fill the design-reality gap of the e-governance practices. There is significant socio-economic potential in the application of open-source software in the successful functions of the e-governance practices. Open source is better for e-Government for economically, localization support, better security. This study further illustrates the as a recommendation suggests the free open source software practices to eliminate the gap.

Key words:- e-governance policy, Free Open Source Software policy, design and reality gap, Local Authorities

1. Introduction

Information and Communication Technology (ICT) is the most influencing factor in every system nowadays. Therefore profession; an influence of ICT is important and the Government is not an exception to this. However, at present using the trend of the technology is increasing rapidly. The word of e-government also a part of the massive achievement of technology. In the mid - the 1990s, technology was introduced to the government system as e-government. There are countries with successful adaptation of the e-government system in the Asian region for example in Korea, Malaysia, and Singapore. E-government is defined as '*The application of electronic means in the interaction between government and citizens and citizens and government and business, as well as internal government operations to simplify and improve democratic, government and business aspect of governance.*' (Rainford. S, 2011) It leads the citizen to engage in the good governance. E-government with the governance system is not yet been perfect. Nevertheless, the government took the key sound functioning of a society has been defined with the different dimension.

In Sri Lanka, Information Communication Technology Agency (ICTA) set out the e-Governance policy framework. According to that, Sri Lanka initiated the e-Government system in the period of 2002 under Sri Lanka's e-development strategy. Through this concept, they provided e-Sri Lanka: an ICT development Roadmap. This program concluded with Re-engineering Government, Nanasala (Telecentres) and the e-society found. After that, in 2006 under the *'Mahinda Chinthana'* this rural ICT development became a comprehensive development (Rainford. S, 2011)

In 2010, Sri Lanka introduced e-government policy framework through the Information Communication Technology Agency of Sri Lanka (ICTA). In 2012, under the ICTA Sri Lankan local government provided the best services to the citizen by the name of e-Local Government Project. In another way around when considering the current planning practice, local government has its own website now. For example; especially in local authorities they provide planning related services like Building. Permits and Preliminary Planning Clearance. As an example, the Colombo Municipal Council is the one which started the web-based administration on local authority level very firstly to issue permits and provide other services. They have their own website which appears like www.colombo.mc.lk. Therefore, people can access and get the information through that particular website. Sri Lankan local government tries to play a significant role to implement the e-governance system. On the other hand, ICTA provides e-Government policy framework by including the communication technology to provide efficient services to people. These policies should be adopted by each government organization and customized if necessary. ICTA carried out annual reviews of the implementation of e-Government policy in 2010, 2011, 2012 and 2013. Unfortunately, the rate of successful implementation of e-Government policy by government organizations has been extremely low, despite the efforts made by ICTA as well as participating organizations.

A framework for the evaluation of ICT policy design and implementation is valuable because it provides the framework to guide all the institutions. It can be used as an efficient way to communicate and encourage reliability in the evaluation. This research attempts to evaluate or investigate the design and reality gap between the e-governance policy and its outcomes.

2. Literature review

The main document followed is the "Policy and Procedures for ICT usage in Government (e-Government Policy) published by ICTA. It is the policy document which is approved by the Parliament of Sri Lanka which outcome from 02-12-2009. (ICTA, 2009)

2.1E-Government Policy

World Bank defines *'e-government as the use by government agencies of information technologies (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. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions.'* The World Bank definition is very specific and a detailed interpretation. The general understanding of the e-government is, the government moves towards electronic. This is what the general public understands. Though it makes a huge impact on some part of the world. Especially in developed countries, it's considered another strategic approach and an important to accept with the current trends. In generally e-Government Policy is a guide to a set of procedures to promote the growth of ICT usage in government organizations for service delivery to the people. It points out a set of instructions and guidelines to follow to achieve specified objectives.

Generally, policies and procedures have been associated with providing electronic services to citizens (G2C), government (other organizations) G2G and to the private sector (G2B). E-Government Policies cover different aspects of it. For example, it could be a collection of facts such as information and communication technologies, automation and electronic service delivery, transparency through information availability, infrastructure, human resources, and legal security. It is a standardization of the above improving e-government quality of services, efficiency, security, and legality. As stated by (Jordi, Puay, Wim Hulsink, & Willem, 2003) the Government's success in promoting e-Government is established by the extensive distribution of ICT-based public services. The main thing is on increasing citizen participation.

2.2E- Government initiation in Sri Lanka

In Sri Lanka with the start of National Computer Policy in 1983, Sri Lankan government realized the development of ICT. The first attempt was the Natural Resources, Energy and Science Authority of Sri Lanka (NARESA) on the instructions of the President. After that, according to the Act No.10 of 1984 Computer and Information Technology Council of Sri Lanka was established. Later on, e-Sri Lanka Project taken place in November 2002 develop an ICT Roadmap of Sri

Lanka. It is implemented by the ICT Act No. 27 of 2003. The result of that Information and Communication Technology Agency of Sri Lanka (ICTA) has established. The aim of the establishment of ICTA is to build the national information infrastructure and make the framework for the advancement of software and ICT enabled industries, Re-engineer the Sri Lankan government as well as develop the human resources based on a development of ICT. ICTA made the e-government policy procedure in 2002 later on 2009 cabinet gave the approval to implement that police in every government organization in Sri Lanka. (Chandragupta, 2012)

ICTA is the one leading to the ICT implication among the government organization. Furthermore, the successful achievement of the ICTA is the development of the policy procedure for the service delivery, using ICT as a tool for service delivery facilities. (ICTA, 2011)

2.3The e-Government policy in Sri Lanka

The E-Government Policy consists of seven main section has covered a variety of subjects including electronic transactions, computer crimes, data protection, intellectual property rights, ICT management, information lifecycle management, protection of personal data, standards, data administration hubs, network – application and data architecture, ICT audit, accessibility and service delivery, contracts and information assets management, ICT project continuity, procurement and contractual issues, communication interface, networking and connectivity, web presence, government network and human resource development. The e-Government Policy of Sri Lanka was approved by the Cabinet of Ministers and published on 02-12-2009. (ICTA, 2009)

2.4 Other country practices in e-Government Policy

The United Kingdom established an agency to provide e-services. The agency has the power to implement the e-government system in departments. United Kingdom government established 27 agencies to deliver services as well as increase the user to access the related services (Jordi, Puay, Wim Hulsink, & Willem , 2003). Further Jordi explained that here are several ICT related activities implemented based on the e-government policy of UK this policy. Further policy content of these factors such as procurement, web-enabled tools to improve public sector and government side improvement. (Jordi, Puay, Wim Hulsink, & Willem , 2003) In Singapore Government has put into place a National Information Infrastructure as the backbone for e-government services delivery. In this strategy, Public Service Infrastructure (PSI) comprises Physical infrastructure, Technology Infrastructure, and Confirmation Infrastructure. The Government has formulated necessary rules, regulations, and policies for an e-Government programme. They have developed a website called e-citizen portal enabling the citizens to ask questions and receive answers and provides delivery of specific electronic government services. One interesting fact is that the Singaporeans have to apply for passport and birth certificate online and the Government will reward citizens for doing this. If the citizen personally goes to the relevant office for the services, there is a penalty imposed. Even after the penalty is paid, he must use the computers provided at the office to request/get the necessary service. (Rahman & Mohammad , 2011).

2.5Other country practices on the e-government in local government

Local e-government extends services to local communities by providing online means for people to get together and communicate in a non-commercial environment in ways more relevant to the government. It provides government agencies with the opportunity to offer new and enhanced services to the public, to increase the involvement of communities in policy making and improved service provision. E-Government has the biggest impact at the local level where between 50% and 80% of the citizens' interactions with public bodies occur. (Heek & Richard, 2003)

In India - Ahmadabad Municipal Council (AMC) is the first municipality in India to have a website or undertaken e-government practices at the local level. Through e-government, an application can improve transparency, accountability, and participation as the most important principle of Good Governance. AMC has achieved the required level of Good Governance. Using IT is the most innovative way to mobilize resources for the AMC and to provide better service to citizens. AMC used 'e-city' as a tool to deliver all its functions to 3.6 million citizens establishing six city civic centers in five zones of the city. City civic centers are on the network connected to the main server and the global internet protocol. Each e-city center is equipped with 10 notes managed by well-trained operators. Every node is equipped to deliver any activity including building plan permission, shops & establishment license, complaints regarding civic amenities or payment of taxes. (Backus, 2001)

The system has two different aspects provides several online facilities

1. System for communication between the citizens and the municipal corporation

2. System for Municipal Corporation's own use

The website also gives online information related to the property tax, procedures and government rules and building and rules and regulations. Citizens can see or download the General Development and Control Regulation from the website. The applications can be downloaded and submitted online. Detail of the structural engineer's architects with the AMC is also available on the website of AMC. The facility of online tracking the status of the application is also available. Payments can also be made through credit card. There has been considerably accelerated transaction process and generates confidence among citizens, builder, contractors, and other section of the society dealing with AMC. Complaints can be presented online (Backus, 2001).

2.6 Challenges facing when implementation of e-Government policy

In Bangladesh, the mental state of government officials poses the biggest restriction of accessing e-Government. There are several reasons to make them resist using computers beyond usual letters and documents typing. Among the principal reasons as resistant to any kind of change in their familiar working environment, fear of computerization of different government activities may make some people redundant, belief that computers are meant for low-level work like that of typists (Alarm, Md shariful, & Hasan, 2011). According to (Mongal & Anil, 2008) there are four challenges in e-Government Policy implementation in India. They are;

- Initial investments – investing money to purchase hardware and software Connectivity and interoperability of databases – there are two concerns when connecting different departments through the internet. - that of the two databases not being compatible and problems with the connectivity itself which leads to loss of 'Interoperability in e-government projects
- Language barrier – use of the English language in the domain of IT. A solution was identified and this is the transliteration

- Mindset
- Infrastructure of power and transport
- Availability of cyberlaw.

The policy implementation practices in developed countries (European, Oceania and America) came up with much fewer problems, unlike developing countries. Most of the problems/challenges in developing counties are moreover ground level problems such as money, infrastructure, and education. However, country like America, have also faced challenges such as home internet access, (household use of internet), poor leadership, Cyber security, issue of public mistrust of the Government, gap between what the public expects from the Government and what the Government actually provides. (Methiews, 2010)

According to reports of the ICTA, not all government organizations are fully compliant with the e-Government Policy. There are different levels of implementation. ICTA has surveyed and rated several government organizations against a few selected parameters of the e-Government Policy. Based on this have been categorized into top level, middle level and lower level in compliance, Several organizations have not participated in the survey. This information is retrieved from the reports published in 2010. (ICTA, 2009)

(United nations 2012 cited by Hyeri choi a, 2015) many countries go through the e-government by providing online service delivery initiatives information and communication technology (ICT) applications. This allows increasing efficiency in the public sector and also supporting to the sustainable development. In the world, rather than the developed countries, developing countries facing the problem of implementing e-government system. Moreover, ICT policy evaluation research very less focus on the success and failure in several countries (Heek & Richard, 2003) Heeks says the classification of ICT policies involve to success and failure and there has been critical theoretical basis relate to the problem evaluation. Sometimes the success of one person can be the failure of another person. Today's success can be tomorrow's failure. However, the government around the global have determined objective to carry out the project with significant financial volume for the application of e-services provision in the public sector. Some empirical case studies to examine long-standing sustainability. For example Gyandoot rural e-government project in India. In that project the satisfaction is high when considering the service, they think is poor people unable to use the service. (Cecchini raina, 2003) another case study in south Africa due to the lack of continuously updated the content and less interactivity lead to the unsuccessful of the community- based e-government initiative . (Benjamin, 2001). Thus (Heeks & Richard, 2002) said developing countries have more cases of ICT initiatives failure partial or totally.

2.7 New Trends for E-Governance

2.7.1Free Open Source Software

(Tao, 2009) mention *' Free and Open Source Software (FOSS). Here the "Free" refers to "Freedom to use" and not "Free of Charge". Here "Open Source" refers to the "availability of Source code for the community/adopter / end-user to study and modify the software and to redistribute copies of either the original or modified software'*. In Indian the National Policy on Information Technology, 2012 has declared, as one of its objectives, *to 'Adopt open standards and promote open source and open technologies*'. (Ministry of Communication & Information Technology & Department of Electronics & Information Technology, 2010)

2.7.2Implementation Mechanism of FOSS policy in India

1. Government publishes a policy framework for prompt and effective adaptations of OSS with prioritizes application area and explain the list of OSS essential for several functional areas.
2. Government Organization will ensure compliance with this necessity and decide by comparing both open source software and closed source software. With reference to capability, strategic control, scalability, security, lifetime costs and support requirements.
3. Government shall develop a proper support mechanism for the available open source software that comprises
4. An institutional mechanism, a partnership with industry, academia and OSS community
5. The government will actively engage with OSS communities in India and at international level and contribute anywhere appropriate

2.7.3 FOSS and e-Government

There are a relationship within the FOSS and e-Government. FOSS can get free of charge and cheaper cost. When it is downloaded from the Internet, cost obtain is for connectivity. AS example when using Linux FOSS software for e-governance advantages both government functions. And the citizen, following benefits gain when using the FOSS (wrong, 2004)

1. Take the least cost for the operations.

2. Providing scalability for future growth.

3. Following open standards for interoperability with other applications.

4. Providing a strong and stable system to support ongoing government operations, a vibrant necessity for trustworthy e-governance systems.

5. Simplifying system maintenance and management

In Africa including Rwanda, Brundi has been developed open office Swahili version that is called jambo. South Africa has Zulu version of open office. In the south, FOSS take a major role of local customization and tailoring of software beyond language to increase the ICT usage, even though with the specific challenges as low literacy level and agrarian-based economies. It is an opportunity for effective e-governance. (Baguma, 2010) .Venezuela adopted an official policy in 2002 for the practice of OSS/FS in their government based on the principle 'Open Source whenever possible, proprietary software only when necessary'. In German parliament uses the Linux operating system to run the application software. And also British police and intelligence agencies, France's culture, defense and education ministries use Linux. And also FOSS have a good cost-effective system as an example, The Finnish Ministry of Finance has estimated that annual saving of 26 million euros possible to made by using Linux in state agencies. (Baguma, 2010)

2.7.4 Benefits of the open source software

1. Foss help to build the human-readable source code software manageable to who wants to get it

2. Users can easily share, modify and familiarize the software to their own needs

3. FOSS technologies support the largest public participation, limited not by copyright restrictions but by one's capability to absorb and change the technology to meet existing needs while putting the base for future generations to meet their individual needs. (Source)

4. FOSS transcends geographical and cultural boundaries to usher in a new software development paradigm where volunteers collaboratively create software for the commons. (Sulayman, Sowe, Govindanl, & Atsushi , 2012)

2.8 Design and reality gap analysis

Heek 2002 highlights the idea of a design-reality gap in e-government projects, the reality "where we are now" and the Design "where the e-government project wants to get us".The Design-Reality Gap Model created by Heeks is an important contribution to the field of e-government and can be extended to policy evaluation, it provides a systematic and uniform way to monitor ICT policy and assess their success. It also highlights a mismatch between the requirements of the users of technology at the grassroots level (the reality) and the understanding of these requirements by those who are designing technological tools to facilitate ICT policy (design).

Software category	Free & Open source	Purpose
Operating system	Linx	Desktop &server operating system
Web development	Apache web server,page tool, php, drupal	Hosting and content management wet development
Office productivity	Open office	Spreadsheet & presentations, word processing
Image processing	GIMP	Image processing
Internet access	Mmozila	Web browsing
Email	Pine, send mail,Kmail	For email service
Auto / Visual player	Helix, ogg, Vorbis	Auto / visual players
Anti virus	Clam, Clamwin	Worms and Trojans detection & cleaning
Database management	Mysql	Database development & management

Even though the Design Reality framework was introduced in 2002, it has been successfully applied and cited in 2010. The diagram below is a graphical presentation of Design-Reality Gaps framework in e-Government Projects. (Heeks & Richard, 2002)and (Heek & Richard, 2003).

This model is also known as ITPOSMO (first letter of each factor). It is a basic path to identify hard- soft gaps, private-public gaps, and country context gaps.

The Design Actuality Gaps Framework recognizes the being of partial successes, where some of the information systems objectives were met, but not all. For a policy evaluation of the information systems in

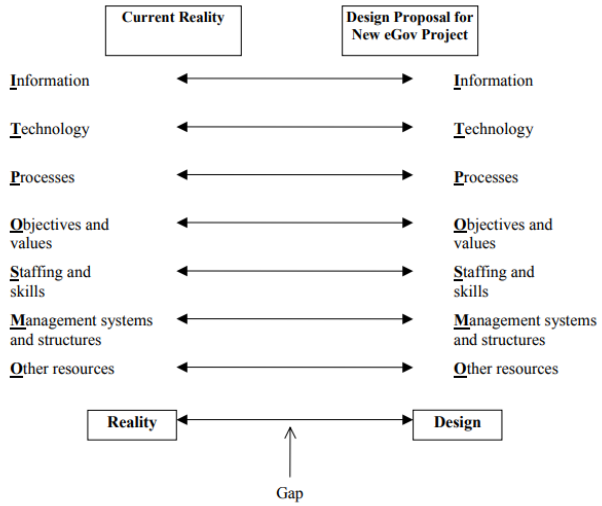
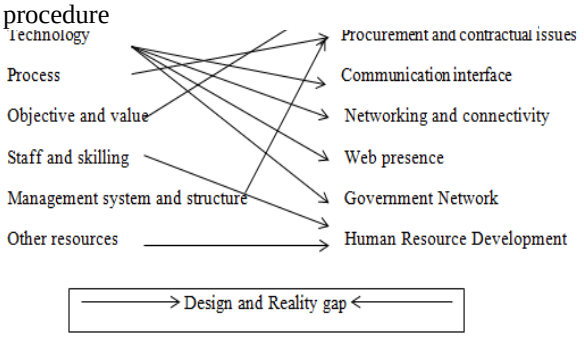


Figure 1: Design and reality gap framework

developing countries, the evaluation of success, failure, and local improvisations can be done across seven dimensions of design and actuality. Respectively information, technology, processes, objectives and values, staffing and skills, management systems and structures, and other resources. This framework has been used in several research publications. (Heeks & Richard, 2002)

The seven dimensions of design-actuality framework help to identify 'gaps' before and after implementing an e-Government Policy. The research intends to find out the design and reality gap in e-Government Policy within a Local government. So that design-actuality framework also cannot use appropriate analysis were carried out by connecting this framework with some aspect. A categorization of four parameters is derived considering the seven dimensions above. The four parameters are financial factors, technology, organizational & managerial and human resource & skills (Heeks & Richard, 2002)

Figure 2: Relationship between Design and reality gap frame work & e-government policy procedure



Here author connects the section in Design and reality gap framework and e-Government policy procedure. The relationship between the diagrams clearly shows the technology sector have most connected with the e-government policy procedure. So mostly anticipate gaps will carry out from the technology sector.

3. Research Methodology

This research has been carried out to examine the e-government policy design and reality gap in Sri Lanka special reference to the local authorities. The local authority is entity more close to the public. Further, the aim of the e-government practices is to all services provided in an easy manner to people. Local government is based on the framework of legislation with powers, functions, and duties, and it provides services and regulates local activities for the promotion of comfort, convenience, and welfare of the taxpayers. The planning approvals implementing through the local authorities. That's why local authority selected as a case study area. Further planning is immerging within the local authority. In Sri Lanka western province selected as the case study of the research.

This study was carried out with two questionnaire survey. Local government staffs as well as user side. Here, the position of CIO (Chief Innovative Officer) is responsible for the e-government implementation, according to e-Government policy it should be a second executive level of the organization. However, the study was covered all the Local authority of the western province. According to the local authority organization structure, the position of CIO was changed. Most of the time e-Government practices handled by IT officer. The second part questionnaire survey was carried out by using a random sampling method represent the community. In addition to interview and observation also used to derive findings.

The secondary data were collected from the Information and Communication Technology Authority in Sri Lanka and Survey report which was published by ICTA in 2011 and 2013.

The quantitative data were analyzed using SPSS software to obtain descriptive statistic percentages, frequencies.

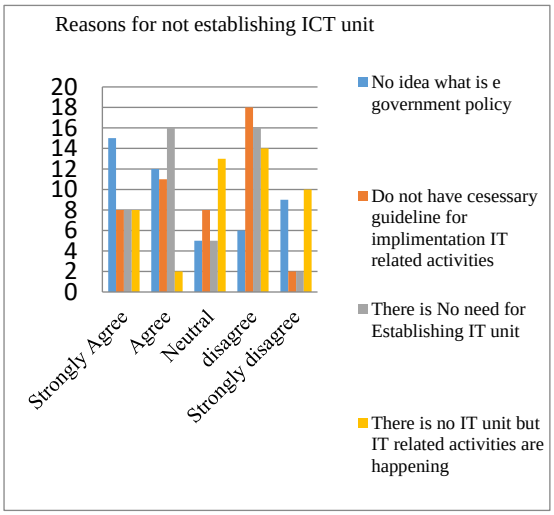
4. Research findings

When consider the awareness on e-government policy in both general public as well as staffs. Among the users have less idea about e-Government policy or e-Government .73% of the people have not any idea about the e-government policy and 27% of the people have a kind of an idea on policy. At the same time, most of the staffs who are in the local authority represent as a CIO have fair knowledge on e-government policy, which is only 38%. Good knowledge represent 34% Even though 28% of the staffs no idea about the e-government policy. Above analysis mention majority of users and staffs not aware about e-government policy. Some of the local authority staffs not aware that there is an e-government system and there is a policy procedure to implement the e-government services.

Consider the media awareness of the e-Government policy. Out of 47 respondents, only 32respondents has answered this question. Rest of 15 respondents do not aware on policy. The Question was asked to the local authority staffs. Out of 68%, 30% of staffs got awareness from the web side .26% staffs got awareness from ICTA which is the responsible agency regarding e-Government practices. 6% of the staffs get to know about the policy from seminars and from head office. A conclusion of this analysis higher level management fails to publish the e-government policy procedure.

The cross-tabulation is drawn between two variables by using SPSS software . Respectively the knowledge of the e-Government Policy and level of using ICT within the authority. The result of the tabulation shows the good knowledge of ICT usage respondents not satisfied with the usage of the ICT and as well as, who is having fair knowledge on policy they mention need to improve the level of using ICT.

Consider availability of ICT unit in the Local Authority. 92% of the local Authority not allocate separate ICT unit. This represent not satisfied level of ICT usage with in the local government. This is the Major gap on the e-government policy. There are local authorities, not having an appropriate officer and not having necessary guidelines respectively. It is clear that all the respondents do not agree with the lack of IT related projects /activities in the organizations being the reason for not having an ICT Unit. This implies there are IT related activities in every organization. The reason commonly stated as the option "other" is that they are moving into ICT and currently working on it which is a positive response



Note: Values 1, 2, 3, 4 and 5 refer to scores (Likert scale, where, 1 = strongly agree and 5 = strongly disagree) used to assess each dimension.

Above figure clearly mention the reasons for not implementing the ICT unit. The question was asked

Figure 4:Reasons for not establishing ICT unit

using linker scale methods. As a conclusion of this analysis is in local authority there are no IT-related activities, do not have a necessary guideline for the establishment of ICT unit those are the major reasons to create the gap.

Annual ICT plan implementation is one of the key requirement of the e-Government Policy, the reason for not implementing annual ICT plan was do not have the necessary support from the ICTA is the one highest responsible 36%. Secondly, lack of qualified persons 26%, still not practising to prepare the plan 24% and not enough time to handle works 14 %. So here, the gap is ICTA does not fully take action to implement e-Government activities. Within this Seethawaka UC and Homagama PS at initial stages to prepare the ICT plan

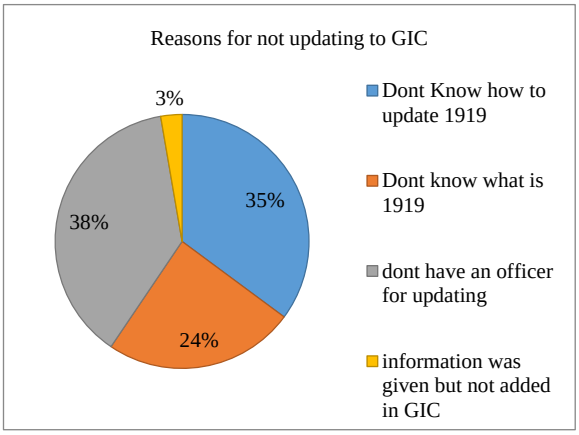


Figure 3:Reasons for not updating information to GIC

because those local authorities involve in LGN project which is implementing by ICTA.

Every government Organization want to update their information to Government Information Center. That is not practicing in the local authorities. Consider the reasons for not updating the information to the GIC, those factors are closely equal priorities. So here the long gap which is barrier to the information shared. Further local authority officers required to get updates and technical inputs from ICTA.

When considering the user side for the information sharing and e-government services delivery

Figure 5:User perception about the e-services from local authorities

Source: Compiled by Author (By Using NVivo Software)

These analyses conclude the people expectation from the Local government. Local government staffs need to improve their interest in service delivery. Most users perception is Staffs should be an actor to deliver services to the public.

E-Service deliver is also one of the key requirement of the e-government Policy figure 6 explain e-service delivery to the people. According to the analysis only for property tax payment using technology, mostly

Municipal Councils have this Practice. To deliver other services not that much using the technology.

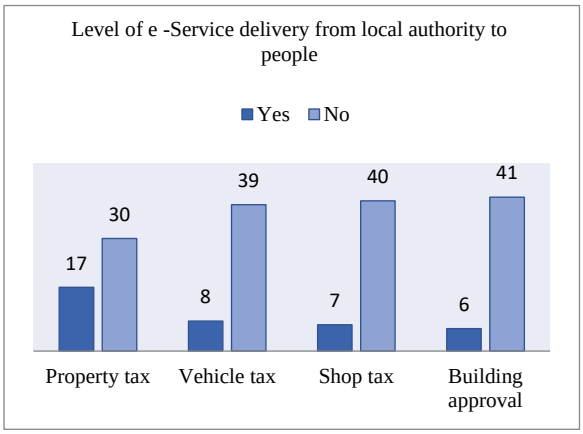


Figure 6:Level of e-services delivery from the local authorities to people

Meanwhile, when considering the level of using software to the daily office work, rather than the MS office Local authority's not using software to do their daily works. Further, they have not powered to updates and work independently. The Special think need to clarify except MS office, some software's as GIS, Payroll, visual basic they not aware of those soft wares. Also, the local authorities who use the soft wares like AutoCAD and GIS they face difficulties to handle the software because those are not much user-friendly and they have to depend from the training programmes.

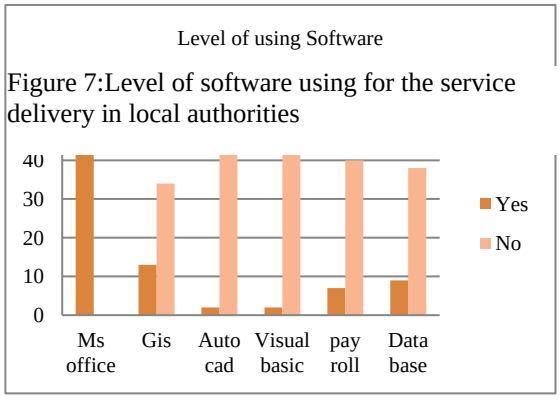


Figure 7:Level of software using for the service delivery in local authorities

Even though the local authorities providing those e-services to the people when considering why the user does not satisfy with the e-services provided by the local authorities the reasons are, users do not have capacity to operate the system 33% the instruction follow in the e-services like Bill payment system and building approval system they could not have capacity, not aware of this practices 29%, also if the user conducted the online services (Via e-mail) local authorities did not pay any response to the user 24% and also do not have infrastructure facilities as computer and network 14% . The gap is come from the user side, even though have the PC they struggle to get the internet connection to access the services. Further discussion with the user from user side perception they do not believe e-government provide the better services to them. Users more keen on their security and trustworthy. User perceptions were the best way to get the services by visiting local authority and get the services rather than wait for the reply on the online service delivery.

Also questionnaire was conducted from the users what are the satisfactory reasons for e-government services, users with high propriety was saved the money and time which is 33% . and no political intervention when getting the services and opportunities 26%, all institution can get the qualifies data rather than using the paper, 25% and also finally users mention they don't want to pay the extra money to full fill their services from the local authorities.

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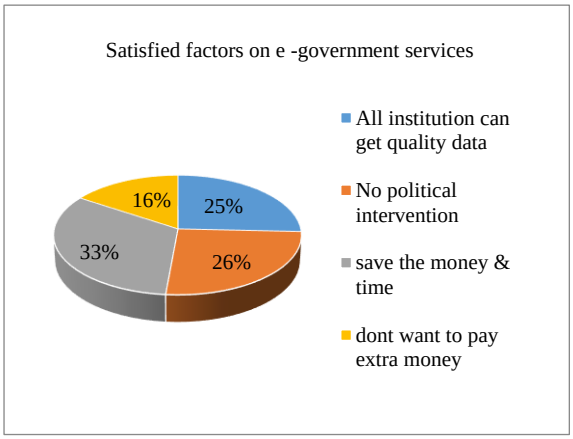

When considering the difficulties to deliver the services to the people from the local authorities results was most of the local authorities facing difficulties on do not have enough skill persons to the delivery the services represented 91%. They strongly agree with that statement. And they facing difficulties on the same level of not appointed an officer to maintain e-services, weakness of current office activities. Respectively 83% and 87%. also their main complaint was people not using the services, not perfect internet connection, do not have access to long updates Here the gap is identifying both sides mainly, not enough skill persons and human resources to deliver the e-government services. Here the important gap is CIO the person who is responsible for the e-government services not appoint in local authorities and another way here can

figure out ICTA formulated policy for the all government organization. However, every government organization have a different structure for their function. Further, another major gap is miss match in policy for the implementation. Therefore, appointed CIO/ICT officer and use three languages, website link to the gov.lk participated in the workshops are law level adaptation in local authorities. Here the CIO is not taking the position on as designation name. In the local authority e-government implementation were taken to action by planning engineer or IT officer

Moreover, there are some indicator practices on the real ground. Updated data should share to Government Information center, Organization should submit the report to ICTA about e-government practices once three months. Content management team appoint to evaluate the website related services those are the key requirements of e-government policy. Below the figure 9 illustrate the amount of the local authorities have practiced this indicator

Further e-Government policy classification seven sectors by author identify some indicator to measure the compliance of e-government practices. These indicators use to measure the level of adaptation of the government policy.

4.1Observation

An observation was taken the Purpose of evaluating the websites. There are some dimensions to the evaluation of e-government implementation.

1. Available to accessible of website
2. Services mentioned in the website
3. Web three language (Sin/Tamil/Eng)
4. Download availability
5. Have identified e-Services

Table 1: Web observation regarding e-services

Stages	Available to accessible of	Services mentioned in the website	Web three language (Sin/Tamil/Eng)	Download availability	Have identify e-Services	No of Local Authority
Basic						21
Ordinary						12
Advanced						13
More advance						15
Excellent						6

4.2Interview to the Local authority staffs

In the informal discussion were carried out while doing the questionnaire survey. Through this discussion able to identify the people expectation in term of creating the course of the policy gap.

The respondent from the local government said the political intervention is one of the key sectors when practices of the e-government in the local authority. Some officer still gets the destination with the help of politicians. So the qualification is secondly considered in the sense of selection the staffs for carried out local government service delivery.

Further e-government policy is not applicable to the local governance e-government implementation. Sometimes general guideline which is mention in

Figure 9: indicators to check the performance of the e-government practices

policy not match with the practices. An also the projects which are design by the ICTA not suitable for the ordinary people that are more advanced, people are not able to use that technology. The miss match with the design and uses.

Still, they are working with papers and pen all process drawing charts Tables, letters and Graphs. Few peoples have official e-mail ID. And also least amount of emails transforming per day. They said ‘still paper have more power rather than the technology’ People expect advance data transfer among government servant and public. Required to introduce application software packages for the accounts department. Further transfer into the online methods. Further experienced senior staff not interested for work with excel spreadsheet they feel indigenous methods are very easy for working. So have to change their mindset.

And also have to provide the user-friendly manner software to enhance the use of the e-services. And local authorities have the financial problems to handle the e-government practices like lack of computers and internet facilities, unavailability of the user-friendly soft wares, so there should be an accurate solution to adapt to the new technology.

4.3Interview of the ICTA officers

Interviews were conducted with ICTA officers, who handle the administration of e-Government Policy. Those were unstructured interviews, which were informal and conversational. The information gathered by the discussions with ICTA officers are as follows. Implementing an e-Government Policy is having IT literate government organizations while providing government services effectively using technology. Especially local government adapt with low level in IT literacy and e-government practices.

ICTA doing to track the Level of implementation has been tracked only through a checklist (excel sheet) sent to the government organization. The excel sheet comprises selected procedures from the e-Government Policy. Still not that much concentration on local government performance but there is a project to the local authority by the name of "eLocal Government Project".

ICTA officers' opinion that the level of implementation of the e-Government Policy was neither equal nor complete in every government organization in the Country. ICTA is giving the backend support to government organizations to promote e-Government Policy compliance. This includes implementation of LGN, support in hosting and developing websites, and training.

4.4 Major findings on design and reality gap

Table 2: Summarized key design and reality gap in e-government policy

Design-Side	**User Side**
No awareness of e-government policy and related facilities	People don't have the capacity to operate the system which is design by the designers
The local authority hasn't any designation to carried out e-government practices haven't appointed CIO	Users don't believe that e-Government can provide efficient services to them
Local authority don't have skill persons to operate new systems	People no aware about kind of e-services providing by the e-government
Lack of seminars and guidance about e-government implementations	Lack infrastructure facility to make familiar with the software
There is no any policy especial reference to the Local authority regarding e-government implementations	No awareness of e-government policy and related facilities
There is no consideration about Local authority's e-government practices because ICTA rarely focuses on the e-government practice in real ground.	Not user-friendly e-services system for

5. Conclusion and Recommendation

Finally, Government applications are rapidly growing in developing countries. Many countries us e-Government as an enabling tool to increase efficiency, enhance transparency and facilitate public sector reform (Bhatnagar, 2004). Further according to the analysis there is a gap between design and reality when implementing the e-government policy in local authorities. Overall conclusion, consider the local authority level in e-Governance practices in lower level compared with the Central Government. Local Authorities are the closest to the community. In Sri Lanka still, e-governance system works in the centralized. Further always required to depend on the training programmes, software update and awareness programmes arrange from the Center. Further Local authorities unable to fulfil minimum required for providing e-Governance services to the community. Therefore findings provide significant design & reality gap. Further this act as barriers to implement e-government policy in local authority level in Use side as well as designers side.

5.1 Recommendations

This recommendation is for ICTA or relevant organizations that are responsible to increase the level of compliance with the e-Government Policy in government organizations. They should consider the effect of incentives and obstacle factors. According to the information derived from the dataset, it would be more successful if they address technological, human resource and skill-based aspects to boost the current level of compliance. According to the results and the conclusions made above, the following implications can be made.

The very first recommendation is to create awareness on the importance of IT and the need for compliance. This should cover all the levels in the Local authority. National level awareness (campaign) programmers on e-Government Policy including all government / private sector employees and the general public. The understanding and awareness of the higher level management are essential for higher level plans and approvals, addressing technical and financial aspects of compliance with the policy.

Establish a proper monitoring and evaluation process. It should comprise a regular post monitoring/supervision method after training workshops. It may also need to cover from the beginning (appointing the CIO) until the end of the programme.

Implement knowledge management systems to share learning, practices and experiences of e-government practices among local authorities. Further training increase the number of officers trained giving opportunities to more officer for example as literature

review mentioned Ahamadabath Municipal Council Civic centers.

Data analysis had been identified that among the seven categories of organizations, Local Government Authorities need more attention and assistance with compliance with the e-Government Policy. According to the feedback and analysis of the research, it is recommended to revise the e-Government Policy and procedure document

There are several plans which are a plan by ICTA. The implementation should take action to the bottom-up approach because we can make the software, but it should be appropriate to the normal user. According to the finding still, people don't aware of the e-government practices. Therefore better to incorporate bottom-up approach rather than the centralized system. Further introducing separate policy procedure in accordance with the context to the local authority.

The new policy procedure is a need in presently in order to promote bottom-up approach service delivery to people. Further, there are new trends of the e-government practices as Open government and Free Open Source software Uses. According to this Free open source software available with more benefits. The local governments should pay the attention to adapt to the open source software uses then we can eliminate the gaps and can achieve the best practices to the e-government policy implementation in local authorities. Moreover, open governance also emerging trend to give more priority to the public. Further, the ICTA want to include the applicable policy procedure by including free open source software practices. So to enhance the successful practices of the government can have a support of the free open source software in local government.

Further research can be a possibility to use the Open Source software while implementing the Free Open Source Software Policy in Local Authorities

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