

The Supply Sides' Perspective on Citizens' adoption of e – Governance (ICT based) Services: A Study on Uhana Divisional Secretariat of Sri Lanka

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Abstract

The term e – Governance is becoming popular among citizens all over the world. Particularly, with the advancements of Information and Communication Technology (ICT), many of the countries have started to provide public services through various kind of electronic means. As a process, e–Governance is using (ICT) to provide public services to the citizens in effective, efficient, transparent, and accountable manner. Sri Lanka has a long history of ICT and remains in an optimum position regarding e – Governance and e–Governance services in South Asia. The e–Sri Lanka program introduced in 2002 and it has major six components. The paper looks for one and important component, named, the Re–engineering Government program. Under this program, most of the Divisional Secretariats (DSs) are providing public services based on ICT. This study explores the supply sides' perspective on citizens' adoption of e–Governance services that are provided by Uhana Divisional Secretariat which is located in Ampara District of Sri Lanka.

Keywords: Adoption, Divisional Secretariat, e–Governance services, ICT, Re–Engineering Government program

Introduction

This study about the supply sides' perspective on citizens' adoption of e–Governance services which are based on ICT in the grass-root level administration units in Sri Lanka, named, Divisional Secretariats. The study has selected Uhana Divisional Secretariat in Ampara District of Sri Lanka.

Sri Lanka introduced a formal e–Governance program, named, e–Sri Lanka in 2002. Ever since, different governments took important initiations regarding e–Governance by getting the advancements of ICT. Under the e–Sri Lanka program, DSs designated to provide more efficient, effective, transparent, and accountable services for citizens through ICT. Rainford (2006, p. 4) noted that, “the vision of e–Sri Lanka is to take the dividends of ICT to every village, to every citizen and to every business and transform the way government thinks and works”. Accordingly, e–Sri Lanka program is giving different benefits for the government,

businesses, and citizens. Citizens can be identified as the largest beneficiaries of this e – Governance strategy. Particularly, they are getting varied services from the administrative institutions. Undoubtedly, DSs are the very close administrative units in the grass-root level in terms of public service delivery.

Since, DSs are providing various kind of public services for citizens, those units became more crucial agencies and citizens expect many things from DSs. Specially, it is said that, ICT can be used in order to create citizen-centric administrative units. Although, the problem is that, what is the level of citizens' adoption of those services? Though, government initiated many e – Governance programs, projects, and policies, are citizens ready to adopt those?. This study tried to find broad answers for these questions. Specifically, the study selected one of an important component of the e–Sri Lanka program, named, the Re–engineering government program.

Objectives of the Study

The general or broad objective is to carry out a research from the supply sides' perspective on e – Governance services which provide by the grass-root level administration bodies of Sri Lanka. There are three (03) specific objectives to identify the service providers' perceptions on:

- I. The level of citizens' adoption of e – Governance services which provide under the Re – engineering government program.
- II. The nature of citizens' adoption of e – Governance services which provide under the Re – engineering government program.
- III. Identify the factors influencing on in citizens' adoption of e–Governance Services.

Research Problem

Sri Lanka remains in a best position regarding e–Governance and e–Governance services compare with other South Asian countries. In 2009, Ali et al. mentioned that, “in Sri Lanka, the national e-government efforts have progressed favourably compared to its South Asian neighbours”. According to many studies that can be found in national, regional, and international level, state that, Sri Lanka has positive experiences and stands in an optimum position on e–Governance. According to United Nations (2014) “Sri Lanka ranks first in Southern Asia, with the Maldives ranking in second position” (p. 28). Even though, it can be assumed that, there are number of issues and challenges related with e – Governance projects and e – Governance services in the country specially in the rural areas. Citizens' adoption of e–Governance services can be identified as one the main issue. Therefore, the motivation for this study emerged to answer the research question; *Does citizens' adoption of e–Governance services remains in an optimum position in the grass-root level in Sri Lanka.*

Literature Survey

The study mainly deals with the concept and themes such as of e–Governance, citizens' adoption, e–Governance services, and the Re–engineering government program of Sri Lanka.

The literature survey will be reviewed international, regional, and national level literature on above main concepts and themes.

e – Governance

Of late, many of the researchers tend to be done studies on the concept of e–Governance. The concept of governance has been changed through many decades and components and characteristics of governance becoming advanced as these changes take place. Sharma et. al. (2012), studied on e–Governance services in developing countries and mentioned that, “electronic governance can be identified as one of most important change in the arena of governance. E–governance has the potential to change the face of government thoroughly”.

On one hand, this new paradigm of governance is changing the way governments think. On the other hand, it is changing the way governments work. According to Kabir and Baniamin (2011), “the governments all around the world are stirring toward providing public services through electronic avenues”. Further, Sharma (2014) noted that, “E – Government is the use of the ICTs in public administrations combined with organizational change and new skills to improve public services and democratic processes and to strengthen support to public policies”. Moreover, United Nations mentioned that, “E – government is defined as utilizing the Internet and the world – wide – web for delivering government information and services to citizens” (Jain Palvia and Sharma, 2007). It is clear that, ICT has been used in e – Governance and public service delivery. “E – government involves using information technology, and especially the Internet, to improve the delivery of government services to citizens, businesses, and other government agencies” (Jain Palvia and Sharma, 2007). It should be noted that, e – Governance involves not only the public sector, but also the private sector and civil society too. e – Governance need not be limited to the public sector, rather it has to be expanded into the private sector, non-governmental organizations (NGOs), and other associations too (Keohane and Nye, 2000 cited in Jain Palvia and Sharma, 2007).

Some of the studies paid the attention on different perspectives and components of e–Governance. Simply, there are four components or interactions between government and other sections of society, namely, **G2G** (Governments to Government), **G2C** (Government to Citizen), **G2B** (Government to Business), **G2E** (Government to Employee).

“The G2G e–government involves building the backbone of e–government by developing the ICT infrastructure at the organizational level” (Ray et al., 2011 as cited in Karunasena, 2012, p. 18). In other words, G2G involves interactions among government officials.

“The G2C e – government involves in facilitating the communication between the government and citizens electronically in an efficient manner” (Evans & Yen, 2006 cited in Karunasena, 2012, p. 17). Importantly, this interaction encouraging the citizens’ participation in e–Governance. “This includes not only the delivery of public services, but also citizens’ participation in the decision – making process in government” (Kaaya, 2009 cited in Karunasena, 2012, p. 17). G2B involves interactions between government and businesses.

“The G2B e–government focuses on improving the efficiency and effectiveness of the delivery of services to businesses and reducing the burden on businesses” (Evans & Yen, 2006; Lu, Shambour, Xu, Lin, & Zhang, 2010 cited in Karunasena, 2012, p. 18).

The G2E seems another internal set of interactions. It involves interaction between the government and government employees. It can be included some activities like salary, pension, and leave.

Citizens' adoption of e-Governance services

The notion of adoption is not a new. Adoption can be created intentionally as well as unintentionally. In this study, it is defined as citizens' intention to get e-Governance services. In other words, it is an intentional acceptance by citizens and there should have an eagerness to adopt those services.

The idea of citizens' adoption becoming a significant theme in studies on e – Governance. Regarding developed countries, there can be seen many studies on citizens' adoption of e-Governance services. The reason may be developed countries have strong enough e-Governance systems and citizens have been involved and participated in those systems in a good extent. "The e-governance movement in developed countries is mostly generated by the availability of internet based technology, through which it becomes possible to access government organizations remotely with cheap cost" (Saxena, 2005 cited in Sharma et al., 2012). Generally, the status and achievements of e-Governance systems not remain in a better position in developing and least developed countries. There can be seen many issues such as lack of ICT infrastructure, less political and policy commitment, less access, inadequate awareness and citizens' participation on e – Governance, and so on. In fact, they have a lack of basic infrastructure to promote advance e-Governance systems and services. "Majority of the developing countries do not have the basic infrastructure and technologies for going online and in the absence of Internet infrastructure" (Sharma et al., 2012).

Even though, developing countries have strong enough e – Governance systems, there should have develop many things in demand side or citizens' side. "Even if there is any, many people do not have the ability to access those resources" (Kabir and Baniamin, 2011, p. 41). However, themes like citizens' adoption, citizens' participation, public value, and citizens' trust in e-Governance of developing countries became important issues need to be addressed. Although, there are many studies regarding developed countries, there can be seen significant studies regarding developing countries (specifically on African, East, and West Asian countries) and least developed countries. Only few studies have been done on citizens' adoption of e – Governance services of South Asian countries (including Sri Lanka).

Basically, some researchers signified the importance of studies on demand side of e-Governance systems of developing countries. Similarly, they realized that, there is a low level of adoption in these countries. Sharma et al., (2012) mentioned that, "a number of e-government researches focuses on the supply side like government infrastructures and policies, not on the demand side, called, the citizens' perspective. Unfortunately, some researchers have been ignored the factor of human beings in their studies on e-Governance" (Heeks et al., cited in Sharma et al., 2012).

Importantly, Sharma et al. (2012), discusses about the e-Governance systems in South Asia with a special concern on Nepal. Overall, one of the most important reason for the low – level adoption that, needs and requirements of citizens have been ignored in e-Governance services of developing countries like South Asia. Researchers identified many reasons for that like low level of human capital, e-Participation, and awareness.

Ahmed (2012), studied on citizens' usage of e-Governance services in developing countries. He focused on Egypt in his study and discussed the factors influencing on Citizens' behaviors. Specially this study attempted to fill this gap in the literature by developing and validating an empirical – based model for systematically predicting and examining the various critical factors influencing citizen intention to use public e – services in developing countries, and enhancing the probability of their participation, as well as, examining the actual implementation of e – government applications in Egypt as an example (Ahmed, 2012).

Rokhman (2011), discussed about e – Governance adoption in developing countries, with the special reference on Indonesia. He showed that, “previous studies found that success of e – government implementation is dependent not only government support, but also on citizen's willingness to accept and adopt e-government services” (2011, p. 228).

Nawaz and Thelijjagoda (2015), studied about citizens' use behavior towards e-Government services in Sri Lanka. They noted that, “preliminary literature reveals that there have been no published researches that study the citizens' adoption of e-Government in Sri Lanka” (2015). However, the findings showed that, if the citizens realize the benefits in their performance gained from e-Governance services, more of them will adopt the system. And the effort expectancy factor has a significant positive influence on the behavioral intention to adopt e-Governance (Nawaz and Thelijjagoda, 2015).

Nawaz and Thelijjagoda (2015), did another study on factors influencing for the intention to use e-Government services in Sri Lanka. This study specifically focused on undergraduate students of South Eastern University of Sri Lanka. The study found that, effort expectancy was significant in the intention to use e-Governance services, however performance expectancy and social influence were insignificant in the use of such services (Nawaz and Thelijjagoda, 2015).

The Re-engineering government program of Sri Lanka

From the government view point, Sri Lanka stands in a significant position regarding e-Governance services and the Re-engineering program has helped to reach for that. Karunasena (2012), discussed about the public value of e – government of Sri Lanka. And he noted that, “Sri Lanka has implemented a unique e-government initiative with the implementation of the re-engineering government program” (Karunasena & Deng, 2009, 2010 cited in Karunasena). The basic objective of this program is to create an advanced public service delivery system in the country. Rainford noted that, “the objective of the Re – engineering Government Program is fundamental reform of government with the objective of improving citizen service delivery” (2006). In detailed, “The reengineering government program pursues major, sustainable improvements in the Sri Lankan government's efficiency, transparency, effectiveness, and quality of services” (Hanna, 2008). However, the Re – engineering government program is conducting main three databases like public, land, and company registers. In addition, it has services such as Government Information Center (GIC), e – Motoring, e – Foreign Employment and e-Divisional Secretariat.

In the literature on this program, Gunawardana (2009), conducted a study about the Re – engineering government program in a business perspective. Specially, his attention paid for the business process Re – engineering (BPR) and stated that, it is a major, important, and time – consuming activity that includes identify and then making changes to existing management

processes, routing, and workflows to enhance the efficiency and productivity of the institution and its management (Gunawardana, 2009).

Jayawardena (2014), studied about the electronic hospital information system implemented at the District General Hospital Trincomalee. However, this information system can be identified as an achievement of the Re – engineering government program. Jayawardena said that, “specially, patients can get their radiological images copied to a CD, thus missing of reports or duplicating of reports will not be a problem here after. They also can do online booking in advance for a date for surgery from the theatre. Hospital records are maintained by the out-patient module. This system was readily accepted by the patients too”.

Thus, it can be reviewed related literature on main two themes and the selected e–Government program. There can be seen many studies on the concept of e–Governance. Moreover, there are some studies on citizens’ adoption of e–Governance services in developing countries. The studies on the Re – engineering program mainly focused on its implementation. But, very few studies focused on the citizens’ perspective on that program.

Uhana Divisional Secretariat and its e–Governance services

Precisely, this paper discusses the implementation of this program in Uhana DS. Under the Re – engineering government program, Uhana DS has three set of e–Governance services, namely,

- I. Public, land, and company registers database.
- II. e – Motoring services under the supervision and technological assistance of the central government.
- III. ICT use in the service delivery process in the pension department (section).

From the beginning, Uhana DS had been the Lanka Government Network (LGN) development program. But, now it is not used properly due to several circumstances. Despite the quality of the service delivery, citizens can receive e–Governance services from their DS. Compare with the previous manual paperwork, ICT based services have been reduced the work load. Similarly, there have been emerged many challenges.

Currently, Uhana DS is providing G2C services rather than G2B, G2E, and G2G services. In the Public, Land, and Company Resisters database are maintaining in a good way. Among these three databases, public register database has been stopped, because of some technical and infrastructure issues. The Land Register database seems newly started one.

e–Motoring services can be identified as one of the popular and well-known e–Governance services set of Uhana DS. From these services, citizens can renew their motor revenue licenses. Previously, they had a service for the all citizens who are in the Eastern Province. From this service, citizen could renew their licenses from any DS located in province. Now, they are providing their services for only the citizens in Uhana Division. Generally, according to the administrative officers, more than eighty citizens are coming to get services from this section. The Pension Department is using ICT in their service delivery process. Specially, they are maintaining databases of pensioners by using ICT. It has been reduced the unnecessary papers and increase efficiency and effectiveness. Now, citizens no need to wait in long time to get their services. “E-pensions aims to increase the efficiency of the pension system, which is plagued by poor service” (Hanna, 2008).

The study looks for the status of implementation of these three services. Even though, these services can be marked as counter services, ICT is using to delivery those.

Methods

The study based on qualitative data. “A qualitative approach to research aims to understand the research problem in the light of the meanings that individuals have given to such a problem based on their experiences” (Denzin & Lincoln, 1998, 2005; Merriam, 2002 cited in Karunasena, 2012). In a qualitative approach, the interview method is (including one in-depth interview) used to collect primary data. International, regional, and national level literature related with the themes such as e – Governance, e – Sri Lanka program, the Re – engineering government program of Sri Lanka reviewed as secondary data. The population of this study included Administrative officers who provide e–Governance services in the selected DS. In this study population, seven administrative personnel have been interviewed. They were selected from four Departments of the DS as shown in Table 1.

Table 1. Selection of the population of the study

Section	Quantity.	Gender	Post
Pension	01	01 (M)	Development Officer
Land	03	01 (M)	Public Management Assistant
			Sustainable Promoting Officer
		01 (M)	Management Assistant
Birth-Marriage Death register	02	01 (F)	
		01 (M)	Additional District Registrar Development Officer
e–Motoring services counter	01	01 (F)	Development Officer

However, there were six Sinhala officers and only one Muslim officer. Structured interview questions provided to these seven officers and among these seven respondents, one in-depth interview was done with a senior officer in the land section. In this case, researcher conducted the interview in a semi – structured and unstructured format.

The questions prepared in English language and translated into Sinhala language. Interviews conducted by the researcher and it took almost three weeks in August, 2016 in the working hours in DS. Six interviews completed successfully. Although two interviews could not get complete answers by the respondents. Some interviews carried out face-to-face and others have been collected back in a week. Researcher helped for some officers to solve some difficulties while answering for structured interview questions.

As mentioned earlier, the qualitative data collected from individual interviews with e–Governance service providers in Uhana DS. Additionally, it is used published documents like books, journals, reports, and etc. on e–Governance.

The qualitative data was analyzed by using the thematic analysis method. “Thematic analysis is a systematic way of grouping complex qualitative data into a number of themes for increasing the accuracy in understanding and interpreting people’s experience or observations about people, events, and situations (Boyatzis, 1998; Attride-Stirling, 2001 cited in Karunasena, 2012).

There can be seen five themes, namely, Information on Divisional Secretariat and e–Governance service delivery, citizens’ awareness on e–Government services, citizens’ usage, satisfaction, and nature of e–Governance services, easiness of e–Governance services, and demographic factors (age, gender, educational level, and Income level) of citizens.

This study does not deal with any kind of theories. “The data-driven thematic analysis, however, ignores the researcher’s theoretical interest in the area or topic” (Braun & Clarke, 2006 cited in Karunasena, 2012). Therefore, the data-driven thematic analysis is used. “In the data-driven thematic analysis themes are derived purely from the collected data. These themes are, therefore, more explicitly analyst driven” (Braun & Clarke, 2006 cited in Karunasena, 2012).

Results and Discussion

On the basis of main dimensions in the structured interviews, the key findings of the study present as follows:

Firstly, in the information on selected DS and its e–Governance services, six respondents received any kind of ICT trainings from government. Only the Muslim respondent received ICT trainings from private institutions. And all of respondents believe that, ICT trainings useful for when they provide e – Governance services for citizens. Even though, most of the respondents were not aware about the e–Sri Lanka and the Re – engineering government program. Especially, female respondents completely were not aware about those programs. But, most of them had undergone enough training and participated for programs on e–Governance services in Sri Lanka. Regarding the ICT infrastructure (computer and other accessories), Uhana DS had enough ICT infrastructure. Similarly, DS had appropriate human

resources (trained or non-trained officers) for providing e-Governance services. Although, the idea of all the officers was there should have more infrastructure and human resources.

Secondly, respondents reacted to the questions regarding citizens' awareness on e-Government services. Some of them stated that, citizens were not fully aware about e-Governance services that are provided. Only a few citizens were aware about those services. However, they believe that interpersonal communication is important to make awareness among citizens. Likewise, communications channels such as mass media and social media have a capacity to acknowledge people. Two officers said that citizens ask about the services from administrative officers. According to more two officers, some of citizens ask, but it is a very rare case. Other three officers said, no, citizens are ask about the services. On the other hand, six respondents stated that they provide enough information about services. Only one respondent said no. To make citizens aware, there are enough instruments (citizens' charter, bill-boards, notices, and etc.) in DS. Similarly, there are some programs to inform citizens in DS.

Thirdly, the interview questions asked about the service providers' opinions on citizens' usage, satisfaction, and nature of e - Governance services. All the respondents stated that, usage of services is not in an optimum level. But, citizens are coming to get services as their needs. However, citizens are satisfied with services. One female respondent expressed that, "citizens are satisfied with services, because of the efficiency and effectiveness of services. Especially, it is not taking much time to get e-Governance services". There are some technical issues to provide services in the Public Registers section. The main connection has to be renovated and when the Internet and other facilities were available, they have provided services in an advanced way. For instance, when there was the internet connection and other facilities, they have provided about thousands of certificate copies. Although, now they can provide only about two hundred copies. The respondent's opinions about the nature of services can be divided by sections (departments) in DS.

In the Public Registers section, basically they have services such as providing copies of birth, marriage, and death certificates under the Birth, Marriage and Death Certificate digitization (BMD) Project (Sri Lanka). However, Uhana DS also provide this service and they can amend those certificates too. Usually, citizens do not come to get copies of certificates and amend their certificates.

In the Land section, they have very few e - Governance services like providing information of land permits, providing land permits and gift papers. Although, this section has many manual works. All the officers maintain big sets of documents.

In the in-depth interview, the informant stated that, still they have many paper works and even they do not have a place to store the relevant documents. So, they have initiated to register lands by using ICT. They have started to computerize the land information. Importantly, information will be updated every three months. Further, it is found in this interview that, some of the administrative officers do not have enough knowledge of ICT. It can be identified as one of the main barrier to have more ICT based services. On one hand, there is a bureaucratic culture that avoids innovations in the grass-root level administrative units such as DSs. On the other hand, citizens have a lack of trust on e-Governance services. Yet, they are expecting and trusting manual services that should include more papers. And there are no special demands

for services. Rarely, some citizens come and ask about services when there are some delays and shortcomings of the service delivery. According to the respondent, attitudes towards e-Governance and e-Governance services should be changed in both supply (government) and demand (citizens) sides.

Specially, these officers were answering to the structured interview questions. In addition, the respondents were talking about the challenges in e-Governance that have emerged in the rural areas of the country including the selected DS. Interestingly, this officer has initiated to create an environment to have an advanced e-Governance service delivery process in the previous DS (previous work station). Unfortunately, some of the administrative officers resisted against those changes.

In the Pension Department, there are few e-Governance services, namely, providing pensioner's pay sheets, sending pensioner's applications and pensioner's details. Among these services, providing pensioner's pay sheets is the service that citizens are getting frequently. Still this section has manual services. They maintain document files and it takes more physical space as well as citizens have to spend more time to get services.

One of the most popular e-Governance service is the online motor revenue licenses. From this service, citizens can renew their motor revenue licenses within few minutes. After starting this service, The Western Provincial Department of Motor Traffic (WPDMT) initiated further innovations together with Information and Communication Technology Agency (ICTA). Currently, most of the DSs are provide this service to citizens. Many of the respondents stated that, this service is the most popular and usage of this service is very high. In a day, they provide about 60 – 70 licenses. In some days, it exceeds this number.

Fourthly, the respondents have expressed their opinions on easiness of e-Governance services. All the respondents said that, it is easy to get services. Similarly, compare with previous paperwork (manual works) in service delivery process, e-Governance services are saving money and time, effective, efficient, transparent, and accountable in nature. And these services can provide in a friendly environment (without conflicting situations specially, with administrative officers).

At last, the respondents presented their observations and opinions about some demographic factors (age, gender, educational level, and Income level) of citizens those who are coming to get e – Governance services from DS. The respondents had different answers about the age levels of citizens that are coming frequently. One said, all levels of age citizens come. Another said, middle age citizens come. Rest of the respondents said that, 18-50, 30-50, 20-50, 20-40, and 30-70. In case of gender of citizens, some respondents said that, both male and female citizens come, but female citizens come frequently. Some said that, both come without any specifics. Regarding the observation and opinions on citizens' educational levels, one an officer said that, usually young people with good education levels come. Two respondents did not have any idea about that. Another two respondents said it is in a moderate level. And other two officers said that, citizens' educational level seemed high (General Certificate of Education Advanced level and above). On income levels of citizens, most of the farmers come to DS. Two respondents did not have an idea about that. Rest of the officers stated that, it could be low, average, and high.

Thus, it can be presented the results by analyzing the data that collected from interviews. It should be noted that, as services providers, most of the administrative officers did not have enough awareness about the concept of e-Governance. Likewise, only few knew about the e-Sri Lanka and the Re-engineering program of Sri Lanka. So, there are problems to acknowledge citizens about services. Moreover, some of the administrative officers did not have a good imagine on ICT and e-Governance services. Probably, it could be because of the fear of ICT and reformations in bureaucracy. These are the main challenges that can be found from the supply (government) side of the e-Governance policies, programs, and projects of Sri Lanka.

Overall, as the responses of interview questions, the DS has sufficient ICT infrastructure to providing e-Governance services. And they have received any kind of training on ICT. Significantly, citizens come to get e-Governance services though they do not have full awareness (or have less awareness) about those services. Although citizens are satisfied with services, the usage of services did not remain in a good position.

Particularly, since this DS is located in the periphery of the country, researcher could collect the data on the real scenario of citizens' adoption of e-Governance services. Because, there are many challenges from the supply side such as lack of political commitment, technological bottlenecks, administrative bottlenecks, and so on. From the demand side, there also have many challenges such as lack of awareness, low trust, low income level and ICT literacy, low education level, and so on. These all challenges badly affected to create a low level of adoption of e-Governance services.

However, in the administrative units located in rural areas of the country such as DSs, the perspective on the e-Governance service of service providers could be like this. Although, many of governments have been tried to make citizens-centric administrative institutions by using ICT. Even though, there are many issues to be addressed before that. Citizens' adoption of e-Governance services seems very low due numerous reasons. It is cleared that the supply side is not that much strong to increase the level of citizens' adoption.

Conclusions

This paper discussed and analyzed the supply side's perspective on citizens' adoption of e-Governance in Uhana DS of Sri Lanka. The interview method was used to collect the qualitative data. The researcher carried out seven interviews within three weeks. Both male and female respondents answered for the structured interview questions along with the supports of open-ended questions. Particularly, female respondents did not show much interest to face for the interviews. Although, most of the male respondents not like that. It should be said that, the in-depth interview with one of an administrative officer was very interesting and it exceeded the expectation of the researcher.

The key findings show that, citizens' adoption of e-Governance service does not remain at the optimum level in Uhana DS. However, most of the respondents had a single idea that, citizens really do not want e-Governance services. Instead of that, supply side (service providers) also do not have a clear picture on ICT based services. Most of the administrative officers provide service delivery for citizens according to the organizational rules and regulations. There are no initiations for the changes at all.

On the other hand, the DS does not have enough ICT infrastructures to provide good services for citizens. As mentioned in the result and discussion, the Public Registers section temporary stopped their e-Governance services. Even though, citizens do not come to demand its services. It seems that, citizens are satisfied with the traditional paperwork. As the responses for the interview from this section, the administrative officers have been claimed proper ICT infrastructure from the central government. But, still they did not receive a positive response. So, they adopted to the manual service delivery system that they had in previous time.

The Land section of the DS, showed another set of perceptions. Although, they had tons of paperwork, they were not expecting to have a service delivery process to provide good services for citizens.

Importantly, the Motor Revenue License counter in the DS provide optimum level of e-Governance services for citizens. By observing its service delivery process, it seemed very effective and efficient.

Compared with the national level e-Governance status of the country, these administrative units remain in a far behind position. It is because of these issues that emerged from both the supply side as well as the demand side. From the demand side, there are no extra ordinary demands for e-Governance services. From the supply side, still they are not ready to undertake innovations in the public service delivery process.

Recommendations

Based on the study results and discussion, some specific recommendations can be made to create high level of citizens' adoption of e-Governance services in the grass-root level from the supply sides' perspective.

- Administrative units should have significant ICT infrastructure and human resources (skilled administrative officers) to provide e-Governance services.
- Citizens should have sufficient level of awareness regarding e-Governance services which can be received from Divisional Secretariats.
- Specially, the government can provide an appropriate ICT trainings for the administrative officers in order to provide efficient and effective services for citizens.
- Administrative units should have adequate awareness programs, tactics, and instruments such as awareness programs for the general public, notice boards, bill boards, provisions in citizen's charter, and etc.
- There seen a lack of insufficient awareness programs on e-Governance services in mass media channels. The government can increase these types of programs.
- The government can encourage ICT based public service delivery than manual paper work. So that, the usage of those services will be increased.
- Citizens should have an adequate sense about the easiness of e-Governance. Administrative officers can provide more information and they can practically proof this easiness.

With these all recommendations, the administrative culture should be changed towards innovations in public service delivery in grass-root level administrative units. Particularly, the traditional attitudes should be overcome to shift into a digital era. Then, citizens will be adopted more e-Governance services.

Future Research

This study is only a part of a massive research on citizens' adoption of e-Governance services in Sri Lanka. And there were many limitations. Therefore, it can provide some ideas for future studies. There are only few studies on citizens' adoption of e-Governance services in Sri Lanka. Therefore, this study will be encouraging researchers to study this area. On the other hand, the supply side's view of e-Governance services and citizens' adoption of e-Governance services in Sri Lanka have not been studied more comprehensively. Since, this study focused on single administrative unit in the periphery of the country, the data can be limited. But future studies can pay the attention on many administrative units. Likewise, researchers can compare the status on citizens' adoption among different administrative units. Additionally, the supply side's perspective can be studied in order to find the challenges in implementation of e-Governance in Sri Lanka. These kinds of studies can be used to identify real scenario of the implementation e-Governance programs, projects, and policies in the grass-root level of the country. So, researchers can study more about the connectivity between administrative units and citizens in terms of e-Governance initiatives. Moreover, more studies can be carried out from the citizens' perspective on e-Governance services. It will fill the research gap that exists not only at national level, but also in the regional level. Finally, this preliminary study will be extended by gathering information from different Divisional Secretariats and the data will be analyzed and compared.

Many studies can be done regarding e-Governance services. But, it seems that, citizens do not have a clear idea or real demand for the e-Governance services in rural areas of the country.

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