

TALLINN UNIVERSITY OF TECHNOLOGY

School of Information Technologies

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Towards mutually reinforcing dynamics - Citizen-Government interaction  
through web-based platforms and mobile applications  
(Case of Samegrelo Upper Svaneti Region, Georgia)

Master's thesis

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MSc

TALLINNA TEHNIKAÜLIKOOL

Infotehnoloogia teaduskond

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Üksteist tugevdava dünaamika poole – kodaniku ja valitsuse suhtlus  
veebipõhiste platvormide ja mobiilirakenduste kaudu  
(Samegrelo Ülem-Svaneti piirkonna juhtum, Gruusia)

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## Author's declaration of originality

I confirm that I have constructed this Master's thesis individually and that the current thesis has not been presented by anyone before. All resources, viewpoints, citations, and other materials from other authors that have been used in this thesis have been referred to.

**Erekle Zarandia**

(05.05.2022)

(signature)

## Acknowledgement

I would like to thank the people who supported us in the process of this master thesis. First, we extend our thanks to all the study respondents who generously agreed to spare their private time to answer our questions, without whom the research would not have been possible. Second, I would like to thank Ingrid Pappel, my thesis supervisor, for her valuable feedback and assistance and Teona Gelashvili, my thesis co-supervisor, for helping me during the whole process of writing my master's thesis.

As the recipients of the scholarships for master's studies, Erekle Zarandia would like to extend special gratitude to the TalTech and ICT school for the generous support and unique opportunity to develop academically and professionally. The day when I got an email from the office of academic affairs about a full tuition fee waiver for the whole study period will drastically change my future career.

## **Abstract**

Towards mutually reinforcing dynamics - Citizen-Government interaction through web-based platforms and mobile applications  
(Case of Samegrelo Upper Svaneti Region, Georgia)

**Purpose** – This thesis aims to outline how the integration of e-services into the governance process contributes to the increase in citizen participation in municipal activities. The main objective of this study is to analyze the introduction and development of e-government, current perspectives and challenges in Georgian local municipal governments, global reach, and since one of the government's primary missions is to promote e-government through the use of e-services.

**Design/methodology/approach** – As a case study research strategy was adopted, together with qualitative in-depth interviews and a quantitative survey. SPSS was used for analysing data.

**Findings** - Qualitative research has revealed low institutional capacity due to a lack of financial resources and a low level of knowledge and competence. However, in the first stage, the positive readiness that the representatives of the local self-governments clearly showed during the interviews is still important. As a result of the quantitative research, 88% of the participants believe that e-services save a lot of time. Almost 90% of respondents have stated that the introduction of e-services can increase the population's involvement in the municipality's activities.

**Research limitations/implications** – A limitation is a sample size of the survey – current number of the surveyed people is 205. The outcomes from this study can be pursued and further tested through the survey among larger number of participants in order to provide for a balanced, comparative analysis.

**Originality/value** – Originality has been demonstrated by conducting quantitative and qualitative studies, and employing respective data analysis methods. Performing scientific study in Georgian municipalities, and analyzing results could be beneficial for the Georgian policy and decision makers, but also, for other countries which are also on their path to implementing e-Government solutions.

**Keywords:** Local Self-Government, E-Government, E-Services, E-participation, Municipality, Georgia.

## List of abbreviations and terms

- ICT** - Information and communications technology
- IMF** - International Monetary Fund
- EBRD** - European Bank for Reconstruction and Development
- EDRMS** – Electronic document and records management system
- OECD** – Organization for Economic Co-operation and Development
- EU** – European Union
- EMFA** - Estonian Ministry of Foreign Affairs
- GDP** - Gross domestic product
- G2B** – Government to Business
- G2C** – Government to Citizen
- G2G** – Government to Government
- LEPL** - Legal Entity of Public Law
- OGP** - Open Government Partnership
- RO** – Research Objective
- RQ** – Research Question
- IT** – Information Technologies
- OGP** - Open Government Partnership
- UN** – United Nations
- UX** - User Experience
- LEPL** - Legal Entity of Public Law
- UNESCO** - United Nations Educational, Scientific and Cultural Organization
- UNDESA** - United Nations Department of Economic and Social Affairs
- ITU** - International Telecommunications Union
- OSI** - Online Service Index
- OSQ** – Online special questionnaire
- ID** - Electronic identification
- EaP** - Eastern Partnership
- e-banking** - Electronic banking
- e-service** - Electronic service
- e-Estonia** - Term used, to describe Estonia as one of the most advanced countries using e-solutions

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# 1. Introduction

## 1.1 Overview of the research

The modern world has seen a paradigm shift in governance systems due to globalization, development, and new challenges. Due to these factors, public administration has become one of today's most important topics.

Citizens face new challenges in a rapidly changing, globalized world. The driving forces of globalization - technological progress, international trade, investment, the free flow of financial and human capital between countries, and a knowledge-based economy - place a heavy burden on state governments. The needs of citizens and the social structure of society have changed dramatically (Cheema S., 2007). "The nature of the state's problems has shifted. The essence of the problems, as well as potential solutions, are becoming increasingly contentious. As the problems worsen, the state's ability to deal with them deteriorates" (Pollitt C. , 2016).

An effective state governance system is essential to society's well-being. The state's prerogatives include the promotion of peace, security, development, social security, and the perfection of all sections of society. Therefore, one of the defining characteristics of a democratic state is the efficiency of the state governance system, which is a prerequisite for the continuous development of a democratic society.

Since there is no "ideal" governance model in nature, existing governance systems are constantly changing to meet the needs of a rapidly expanding society. As civilization advanced (rapid technological development, growing social demands), governments changed from the nineteenth to the twentieth centuries. As a result, the style and methods of governance have altered, both in states and globally.

The evolution of government systems today can be understood in the context of the redistribution of power (society for a better society). The days of almighty power in any part of the world are long gone, and the number of major players in each society has changed significantly.

This process has been accelerating in the latter half of the twentieth century. In the system of government, horizontal power distribution (dividing power among different organs of government, such as the parliamentary, executive, and judiciary) was institutionalized, and the vertical

distribution of power began (in some places) at sub-national sub-levels (between regions, cities, and communities) within the state. Of course, when it comes to the horizontal distribution of power and responsibilities, one should consider the need for distributed resources, capacities, and readiness to tackle existing or potential difficulties. As a result, a new public administration and management style has emerged. There are three general trends in the ongoing transformation process in the field of public administration:

1. The changing role of public authority in the governance process
2. The territorial and sectoral transformation of central government functions
3. The increased influence of international regimes and international competition.

This trend is also noticeable in local and regional development (Pike A., Rodriguez-Pose A., Tomaney, J., 2006).

### **The first change**

The state's role is undergoing a transformation in the field of public affairs management. The structure of the state and society today has become much more complex and diverse, and more complex and diverse interests have emerged. As vast literature highlights, at least three sectors are involved in the management of modern society: public government, business, and the non-governmental sectors. There are many sectoral and territorial interests even within these sectors themselves (Vischer K. R., 2001).

As a result, the process of public administration today goes beyond the minor importance of the management of public affairs by public authorities. Public authority no longer has a dominant role in this format. It is only the first among equals. Hierarchical governance mechanisms are being replaced by forms of cooperation and coordination based on the realization of common interests and mutual benefits (Stoker, 2011).

### **The second change**

In the modern environment, the centralized management model loses efficiency due to reducing the ability to solve problems individually (Vischer K. R., 2001). This tendency is well expressed in the statement of the famous American sociologist Daniel Bell: "The nation-state is becoming smaller to solve the big problems of life and bigger to solve the small problems of life" (Bell D., 2013 )

The state government is so preoccupied with global and big problems that its ability to adequately respond to various local and regional issues is limited. The crisis of centralized management has popularized the idea of a small state, which has led to a widespread trend of decentralization in the world (EBRD, 2008)

In addition to redistributing state power functions, numerous autonomous and semi-autonomous public institutions have been formed (agency, department, a legal entity under public law, etc.), and several public services have been privatized. It should be noted that the territorial redistribution of central government functions does not occur only within the state, and several issues are under the jurisdiction of inter-state, inter-regional, and inter-municipal institutions.

### **The Third change**

In the era of globalization, the state's internal economic and social policy is increasingly influenced by international factors. At the same time, the influence of international regimes and institutions (World Monetary Fund, World Bank, World Trade Organization, etc.) are growing, which significantly reduces the ability of state authorities to solve various challenges independently.

The idea of a centralized state is weakening, which promotes the decentralized state paradigm. Regions and the regional concept of human community structure are far older in history than modern national states and states of the nation. By their nature and character, the regions are the initial ways of connecting individuals and the human community, identifying the location that best reflects and realizes a community's interests. States have shrunk to the size of small units to tackle big-scale problems, while the federal government has grown too huge to manage the issues of cities and regions.

The modern system of governance largely depends on the democratic mechanisms and participatory implementation of decentralized, local government. The number of literatures highlights the importance of good governance, the whole-government approach, and the promotion of other innovative approaches. Before moving to the contemporary methodology and approaches to defining self-governance, it is worth briefly reviewing academic definitions of the classical understanding of self-governance.

In general, the relationship between central and local government is undergoing significant changes due to many different factors: globalization, the impact of European structures, urbanization, and others.

Among the benefits of decentralization is the system's flexibility, which can adapt to local interests and is focused on solving governance issues quickly and easily. Decentralized authorities are close to the local population and know their interests. They are also better aware of their interests, and the local population is directly involved in solving public issues.

The idea of decentralization required strengthening the principles of local-self-government and bringing it forward on the agenda.

The European states have responded to this demand by drafting a European Charter of Local Self-Government (European Charter of Local self-government, 1985). With the increase in the number of Charter signatories, the laws of these countries have also undergone significant changes.

This study aims to gather empirical and secondary data, describe the functions of local self-government, study the forms and experiences of population involvement, learn from a successful Estonian model, and then make recommendations for the issues concerning local self-government in Georgia.

Future Georgian research and local government will hopefully benefit from these findings. Paperless office practices are widely used in Estonia's public sector using Electronic Documents and Records Management Systems (EDRMS). Despite many challenges and obstacles, Estonia has overcome them over time and increased its efficiency (Pappel, Ingrid; Tsap, Valentyna; Draheim, Dirk , 2019). More than 90% of public document exchanges in the country are digital documents (I. Pappel, V. Tsap, I. Pappel and D. Draheim, 2019). In Georgia, the public sector aspires to follow the Estonian model of successful transformation.

## 1.2 Research Motivation

In today's world, both public and private institutions are introducing more and more e-services to the broader population, as we can all see. Georgia successfully launched several e-services under its participation in the International Open Government Partnership (OGP) project in 2011 (OGP , 2011), which played an essential role in advancing e-government. In addition, the involvement of

the private sector is crucial to creating more visibility, where TBC Bank has received several awards for its Internet and mobile banking services in Central and Eastern Europe and Georgia (TBC , 2022). To control the use of budget funds, improve transparency in information, and offer information and financial services, implementing an e-government model is essential.

It may seem surprising that various types of state institutions do not necessarily follow these trends (at least not adequately). This research is motivated by the hypothesis that public institutions in Georgia might not be sufficiently using e-services and ICT tools available for increasing citizen participation, transparency, and overall strengthening democracy. At the same time, it must be highlighted that the Government of Georgia has launched several phases of public sector reforms and encouraged digitization and application of electronic services. Moreover, the public sector (especially in the central administration) has often been praised for successful digital reforms. However, this study questions the spread of success in the regions of Georgia.

Local self-government topic is an essential issue for Georgia. Its development is linked to economic growth and population involvement, as this institution is closest to the people, ultimately increasing local and national democracy.

The Georgian government has launched a slew of new services based on information and communication technologies (ICT) to boost government efficiency through technological advancements, administrative reform, and the transformation of public services. Despite the high level of development and achievements in e-government, the Georgian government sector still faces numerous challenges.

The author was motivated to work on this topic by interest in these two issues. The effective work of local self-government and the introduction of e-government will further accelerate the country's economic prosperity. Many democracies believe that addressing local self-government issues is essential for the regions and their people and any organization with local self-government functions.

### 1.3 Research Questions (RQ) and Objectives

Generally, motivation is most important when started working on a new project, followed by understanding its essence. In our case, the first research question concerns the readiness of local authorities to introduce e-services. It is also interesting to find out how well local governments

understand the benefits of e-services and their competence in determining how realistic the introduction of e-services is. That is why the first question was formulated as follows:

- RQ1 – What are the local self-governments' institutional capacity and readiness levels for launching and operating e-services?

As previously stated, both private and public institutions focus on introducing e-services, hoping to increase citizen participation and turn their practices into more open and flexible services.

- RQ2 - what is the level of citizen engagement and participation in the activities of the selected self-governments?
- RQ3 - How can e-services affect the engagement and participation of citizens in the activities of the selected self-governments?

To answer the research questions, it was decided to use a qualitative approach to collect empirical evidence. Below are the Research Objectives that will form the basis of the future analysis: The research project aims to analyze the e-government of local self-government in Georgia and study its development potential.

- Gathering information and data on institutional capacities and readiness of the local self-government entities in Georgia: implementing desk research, report analysis, and experts and representatives of local government interviews to have a clear vision of institutional readiness to launch e-services in local governments.
- Identifying and mapping the forms of citizen engagement in the selected local-self-governments of Georgia - considering and reviewing perspectives for enhancement, focusing on the specificities of the selected regions.
- Collecting and analyzing outcomes to bring the thesis in line with the ultimate goals of the research.

In the research, the human role must be clearly emphasized and presented as a factor in institutional change and socio-economic development. In economics and public administration, any decision is made by the people. Consequently, talking about the development of e-services and the population's involvement, which increases the country's democracy index, is unreasonable without a human factor.

The preliminary assumption is that technical and content-related problems are in the selected region. (Lack of access to internet infrastructure and devices in some parts of the region, lack of capacity to use devices, absence of digital and communication skills, seldom update of information on the websites – all these leading to lack of trust).

## 1.4 Research Methodology

Substantiation of research methodology and compliance with research objectives. Methodological limitations / difficulties and advantages.

As part of the research process, an inductive case study has been utilized to examine a specific phenomenon (J. W. Willis,, 2007). Yin defines a case study as "an empirical method that explores a contemporary phenomenon in depth and within its real-world context" (Robert k. Yin , 2018) (Yin, 2018). The selection of this method has significant advantages. To begin with, it allows for the explanation of presumed causal links in real-world interventions. In addition, it describes the response and context of real-world events that occurred. Furthermore, it illustrates particular topics in the evaluation. The use of case studies also helps illuminate situations with no apparent outcomes. (Robert k. Yin , 2018)

The present thesis is based on a careful analysis of Georgia's selected regions and municipalities, reviewing their practices, challenges, and achievements. Based on the findings, the case study will present recommendations suitable for other regions and municipalities of Georgia. The reason for selecting these municipalities in western Georgia is that they represent one of the country's large and complex local self-government. Also, they are very close to the breakaway region of Georgia – currently occupied by Russia. Therefore, considering and analyzing the municipalities closer to Abkhazia was a priority for author. Since there are three research questions in the research project that need to be solved to obtain the research results, the description of the research methodology according to the questions will be more relevant. Since we have three research questions in the research project that need to be solved to obtain the research results, the description of the research methodology according to the questions will be more relevant.

The research methodology will be based on theoretical works of both Georgian and foreign sciences, and reports of international organizations can also be actively used. The research methodology will be based on the qualitative method for the first and second questions. To study



the topic in more detail, the author will conduct interviews with competent persons and representatives of municipalities due to qualitative research. To determine whether local governments are prepared to implement e-government in the governance process, both in terms of knowledge and financially, to facilitate greater population participation. That is why interviews with local governments will be conducted to determine their current capabilities and vision in terms of e-government and e-services.

Based on the research objectives, a specific questionnaire will be developed. An in-depth survey will be conducted where the author has taken the local self-governments in the Samegrelo Upper-Svaneti region of Georgia as a specific case. In-depth interviews with respondents will help explore critical trends and state policy gaps. In-depth interviews will help the author easily get feedback from respondents especially given that the target audience was less accessible to the author at this point (due to the distance).

Based on the analysis of the results of expert interviews, a structured quantitative research questionnaire will be developed, in which up to 205 people will participate. The data obtained from the quantitative research will help the author to answer the research questions second and third. Quantitative results will be processed in the SPSS.

The following methods will be mainly used during the research: Quantitative (online survey) questionnaire will be designed within the research based on the research objectives. Methods of analysis, synthesis, qualitative, statistical and comparison will also be used. (Interviews will be conducted online).

The research's main difficulty is finding the qualitative variables and integrating them into the model. The source of qualitative variables can be administrative sources and surveys conducted by international/local organizations, including parts of subjective evaluations of surveys and public opinion polls.

A unique approach would be to present human factors as qualitative variables. Examples of qualitative variables are local self-government performance appraisals, community-named engagement issues, e-service usage analysis, readiness and availability of e-services, and existing e-service development opportunities analysis. The author suggests that the study contains:

- 1) literature review – key (and relevant) concepts, theoretical framework and Models of E-Government, citizen engagement, Citizen-Government interaction.
- 2) Quality and frequency of interaction between citizens and government.
- 3) Accomplishments and failures (lessons learned) in the selected region (analyzing the identified case).

The scientific value of the research results will be the completion of practical research on local self-governments in Georgia, which is especially important for the development of local self-governments in Georgia. The research results will be interesting not only for Georgia but also for other post-communist countries. The research results and the package of recommendations will be available to all self-governments of Georgia. The research is conducted in the Samegrelo-Upper Svaneti region, and the author will present the findings to all municipalities in the region and the public.

## 2. Literature Review

This thesis discussed methodology, research questions, and an overview of the topic and problems of the study area in the earlier chapter. The next step is to present the literature review. This chapter will discuss appropriate theories to answer our research questions and make connections. We will present relevant literature on decentralization, local self-government, and e-service development throughout this chapter.

Considering that we are investigating the involvement of the population in the activities of local governments via electronic form, we must address several key concepts, including local self-government, decentralization, e-government, and e-services. This literature review consists of an overview of the following works:

*Table 1 - An overview of the literature review. Source: Author*

Author(s)	Title of the work	Focus areas
Ahmad, J. (2005). Decentralization and service delivery (Vol. 3603). World Bank Publications.	“Decentralization and Service delivery”	Decentralization as a driving force for improving service delivery

Axel Dreher. (2006) Working paper N121 Heidelberg University	"Power to the people? The impact of Decentralization on Governance	Impact of decentralization on governance employing four indicators of governance and five measures of decentralization.
The World Bank report on Decentralization (2013)	Decentralization, BRIEF	The community-driven development (CDD) and Decentralization, the working paper focuses on the Benefits and challenges of decentralization
World Bank Policy (2005) Research Working Paper N3603	Decentralization and Service Delivery	various instruments of decentralization—fiscal, administrative, regulatory, market, and financial the process of transferring responsibilities of the state to lower tiers of government.
Gomme, G.L. (1987) Literature Review Haque, Adnan ul Research Institute of Behavioral Psychology (2012)	Indicated in 'Theoretical Perspective of Local Government	Definition and clarification of the term 'local self-government'.
Caroline Hay Thornthwaite and Barry Wellman (2002) pp. 1-41	The Internet in everyday Life	Internet as a complex landscape of users, internet population, its functions and role in everyday life.
Ines Mergela, Noella Edelmannb, Nathalie Hauga (2019) Volume 36, Issue 4.	Defining digital transformation: Results from expert interviews	Definition of digital transformation, changes in bureaucratic and organizational culture, effectiveness of digital transformation and citizen satisfaction.

## 2.1 Theories about Decentralization

The first topic that the selected literature highlights are decentralization, which is the form of local self-government that it should have. In some countries, the decentralization process precedes local activities. In others, for example, in Georgia, a form of decentralization has not yet been established that will strengthen local self-government. That is why we needed to discuss this topic and look at a few articles or books to understand the essence of decentralization.

This issue has many supporters and opponents, which we think is natural because decentralization is not an exact science. Its development and implementation are carried out by people in different countries with different methodologies and welcome results. In addition, many other indicators emerge in the decentralization process if we discuss this topic in depth.

A. Junaid's "Decentralization and Service delivery" world's bank policy research paper examines the relationship between Decentralization and Service Delivery (A. Junaid , 2005). Decentralization is an essential motivation for efforts to improve service delivery, but practice and reality have already been different. Many issues face local governments, including insufficient local capacity, misaligned responsibilities, and excessive borrowing. According to this paper, policies governing fiscal transfers, regulations, and expenditures between the central and local governments are important determinants of decentralization's success.

As the decentralization refers to the process of redistributing or dividing financial resources, functions, powers, people, or goods from the central government at the subnational level, A. Dreher's in the paper "Power to the people? The impact of Decentralization on Governance" focuses, that decentralization can improve governance when it forces people in political positions to compete, as shown by a quantitative analysis of the process in low-, middle-, and high-income countries. However, suppose the government has too many levels or is bureaucratic. In that case, coordination will be hampered, and there is a link between an increase in decentralization and a decrease in foreign direct investment (FDI) (Axel Dreher , 2006).

It had many forms of local self-government (societies - led by elders, Old World politics, and medieval cities - with developed and complex governance structures, etc.). Decentralization took place in different configurations and depended on the type of self-government they had before. In this regard, it was interesting to analyze the World Bank on the types of decentralization.

## 2.2 Theories about Local Self-government

Most scholars agree with the preamble to the European Charter of Local Self-Government, stating that local self-government is "one of the fundamental foundations of any democratic regime".

For Charles Louis de Montesquieu, one of the authors and prominent representatives of constitutional reform in France, the main sign of democratic governance was the decentralized distribution of power, emphasizing the direct involvement and participation of citizens in governance. For him, the one-sided government was a completely unacceptable form. In his opinion, the residents of a particular city should have the opportunity to resolve the current issues before them because no one knows the content and peculiarities of the problems better than the local population (Montesquieu, 1994).

According to Alexis de Tocqueville, one of the most prominent French diplomats, historians and political scientists of the 19th century, the power of a free nation starts from the municipality and the sovereignty of the people - "the principle or dogma of the sovereignty of the people".

"Province has given to each individual, whomever he may be, the degree of reason necessary for him to be able to direct himself in things that interest him exclusively. Such is the great maxim on which civil and political society in the United States rests. Extended to the entirety of the nation, it becomes the dogma of the people's sovereignty" (A. D. Tocqueville, 2012).

Lorenz Stein (author of the legal theory of governance) and the German lawyer G. Elinek labor, self-government is seen as a more effective mechanism for resolving issues than the state bureaucracy. Only by self-organizing, active population can it solve local problems effectively.

According to Gomme ( G.L.Gomme, 1987), local government is "a subpart of a nation or state that is administered and managed by a system subordinate to the authority of the state, but independent of the control of the state, by local elected representatives, or located in specific regions, whose structures are based on common interests and common histories."

On local self-government, Georgian and foreign public figures and great thinkers hold similar opinions (Georgians Ilia Chavchavadze and Niko Nikoladze). Although they discuss the importance of local self-government, the content of the opinions is identical, and they feel the same way about what this living institution is important. In the modern era, decentralization and redistribution of political power are considered democratic steps because unrestricted use of power by governments at all levels results in weak democratic governance and the loss of democratic rule.

### 2.3 Theories about e-government and e-services

E-government has been widely demonstrated to facilitate and motivate citizens to become more engaged with local government through frequent interaction and engagement. COVID-19 illustrates this better than any other event since face-to-face contact has been restricted since early 2020. Almost all exchanges, services, and communication will be conducted online/with digital tools or distance methodologies. As in all areas, the global pandemic has touched upon the citizen-government interaction, and e-governance can be considered as one of the opportunities in this regard – one could argue that e-communication tools could be a way out in the context of global

health and economic crisis. Indeed, while mentioning citizens, we mean entrepreneurs and private sector representatives.

The internet has become an important tool in daily life, and online opportunity is fast growing in any industry direction. In this regard, state institutions need to offer e-services to both the private sector and the local population to save time, finances, and other benefits.

According to Ines Mergela, Noella Edelmann, and Nathalie Hauga, the article “Defining digital transformation (I.Mergel, N. Edelmann, N. Haug., 2019): Results from expert interviews” provides a holistic definition of digital transformation and its significant role in changing the culture and organization. It indicates how digital transformation has a long-term impact on the effectiveness and citizen satisfaction.

### 3. Understanding the essence of local self-government - Overview of the core concepts: decentralization, self-government, and e-government

#### 3.1 Decentralization as a concept and a definition

Public sector reforms in developing and transition countries worldwide have increasingly been focused on strengthening local governments' role in the public sector over the past two decades. However, decentralization often fails to deliver the promised benefits despite the best efforts of the international development community. Decentralization opponents often point out that local governments have a weak institutional capacity, which limits the provision of local government services. Although, many technical, political, and institutional obstacles can hinder the proper design and implementation of decentralization and local government reforms (J. Boex, S. Yilmaz, 2010)

Decentralization refers to redistributing or dividing financial resources, functions, powers, people, or goods from the central government at the subnational level. According to Earl. P. - "The concept of decentralization refers to dividing a group of functions or activities into relatively independent units whose function and operation are jointly managed by the manager of a common unit".

It has also been highlighted across literature that the means of achieving decentralization is far from being new or easy: The question of how to achieve a well-functioning local public sector or

a decentralized system of local governance—including in the context of developing economies—is not a new one" (J. Boex, S. Yilmaz, 2010) (IDG Working Paper No. 2010-06). Moreover, the Decentralization assessment framework has been suggested by Jamie Boex and Serdar Yilmaz, which covers many different aspects, including local political structure, Political decentralization and empowerment, technical dimensions, Administrative (and regulatory) decentralization, Fiscal decentralization... indicating nine important areas of a well-functioning decentralized public sector.

While discussing decentralization, OECD introduces the term –Multi-level Governance, which is a complex type of public governance and requires the collaborative engagement of stakeholders. OECD's Handbook for Policy-Makers indicates it is a Transfer of powers and responsibilities from the central government level to elected authorities at the subnational level (regional governments, municipalities, etc.) and has some degree of autonomy. Decentralization covers three distinct but interrelated dimensions: political, administrative, and fiscal" (OECD Work a Handbook for Policy-Makers, 2019). It is also highlighted that Decentralization trends worldwide have gone hand in hand with an upscale in subnational governance through municipal cooperation, metropolitan governance, and the strengthening of regions".

The main principle of decentralization is the principle of subsidiarity. This means that any public authority that can be effectively exercised at a lower level should not be placed at the top; there should be a hierarchy of matters, and the decision-making process should be designed "from the bottom up," not the other way around.

Cambridge English Dictionary defines subsidiarity as "the principle that decisions should always be taken at the lowest level or at the most convenient place where they will impact, for example, locally rather than nationally" (Cambridge Dictionary, n.d.)

Subsidiarity is one of the character traits of the federalism principle. This concept or principle can be found in several different constitutions worldwide (for example, the Tenth Amendment to the United States Constitution and the 1993 Maastricht Treaty). One of the most apparent examples is Switzerland, an influential federal state founded on the principle of subsidiarity.

Decentralization is one of the most significant reforms of the last generation due to the number of countries affected and the potentially broad implications for the nature and quality of governance (Jean-Paul Faguet, 2014).

The significance of reform extends far beyond the vast number of ongoing experiments. Many decentralizations aim, at least in theory, to restructure government – from a hierarchical, bureaucratic mechanism of top-down management to a system of nested self-governments characterized by participation and cooperation, where transparency is high and accountability to the governed acts as a binding constraint on public servants' behavior. In pursuit of this, many countries have devolved significant authority and resources to their sub-national governments.

Decentralization is the division of power between governments that prevents accumulation and centralization and allows for further public freedom and effective governance, so it is crucial to democratic values.

Decentralization is a concept that is not easy to define and perhaps even harder to measure. There is no single specific definition of decentralization, but the World Bank uses the term - The strengthening of local government in the modern world, which began in the nineteenth and twentieth centuries and is gradually becoming more vital.

Decentralization describes a wide range of public sector reorganizations: Decentralization refers to transferring responsibility and power from the central government to intermediate and local governments or even to the private sector. It is essential to distinguish the different types of decentralization, including the numerous characteristics, success conditions, and policy outcomes, since it is a complex and multifaceted concept (IBRD, Decentralization, 2013).

Decentralization occurs in some countries where the central government has traditionally wielded considerable power. It is not a new phenomenon; many forms of local self-government have existed throughout history (communities - headed by elders, policies of the ancient world and medieval cities - with developed and complex governance structures, etc.).

Power redistribution on a territorial basis can take various forms and degrees, depending on the specific needs, beginning with the retention of control by higher levels and ending with the full transfer of specific powers. In the public sector, there are three types of decentralization:



Table 2 –Types of Decentralization, source: Author

<p><b>Political decentralization</b></p>	<p>The transfer of political power and decision-making power to the sub-national level, such as elected village councils, district councils, and state-level bodies. Local governments are democratically elected by their constituents. Permanent elections clearly define responsibilities and powers, and an adequate legal, political, and functional framework is necessary to function effectively.</p>	<p>In other words, such a process is known as a – <b>Devolution</b>, it occurs when power is fully transferred to lower levels and is carried out using local resources. As a result, the implementer (local self-government) is accountable for the outcomes not to the central government at the highest level but to the law and the people.</p>
<p><b>Fiscal Decentralization</b></p>	<p>Describes the redistribution of local resources that enables local governments to function effectively and finance the responsibility for providing assigned services. Fiscal decentralization policies generally address the imposition of local taxes and revenue distribution via local taxation and consumer and market fees. To work successfully, it must increase revenue autonomy, build capacity for data analysis for budget decisions, and establish proper trustee controls.</p>	<p><b>Delegation</b> occurs currently, in which higher (typically upper level) levels of public authority delegate authority to lower levels to implement individual issues (local governments, etc.). However, the top-level continues to supervise the activities' quality; it transfers sufficient (financial) resources and monitors their efficiency and quality.</p>
<p><b>Administrative Decentralization</b></p>	<p>entails the transfer of many of the decision-making powers, resources, and responsibilities from selected central public services to other lower levels of government, agencies, and central government line agencies</p>	<p>It can also be described as <b>Deconcentration</b>: state institutions (ministries and other agencies) establish their own bodies in different areas (for example, regional representatives of the Ministries of Internal Affairs, Education, and Justice).</p>

**Deconcentration** is a controlled form of decentralization, and it is most used in unitary governments (a system of political organization in which most of the ruling forces belong to the central government). The central government delegated its decision-making authority, financial management, and managerial responsibilities during deconcentration. Central government officials can only delegate responsibilities to employees in regions, provinces, or districts, create vital administrative spheres, or create local solid government administrative capacity overseen by central government ministries.

**Delegation** is a broader form of decentralization. By delegating decision-making and administration of public functions, government agencies delegate responsibilities to organizations

that are not fully controlled by the government but are accountable to it in the long run. Typically, these organizations have the authority to participate in the decision-making process. They may be exempt from the restrictions that apply to regular civil servants and may be able to deduct money from direct services provided to customers.

**Devolution** is frequently regarded as the most radical form of decentralization. When governments delegate functions, they give decision-making, financial, and management authority to autonomous local government units with corporate status. During a devolution, responsibilities are typically delegated to municipalities and councils, which elect mayors, generate their own revenue (at least in part), and have independent authority to make investment decisions. Local governments in this system have clearly defined and legally recognized geographical boundaries over which they exercise authority and perform public functions. Most cases of political decentralization are based on this type of decentralization.

The tendency to transfer more and more powers and responsibilities to the local self-government units in the world has been observed since the middle of the last century. All countries differ in the degree of decentralization, although one important pattern is observed - in developed countries, this process is much further than in developing countries.

Decentralization is a complex and multifaceted concept while measuring decentralization is equally complex. Therefore, one of the best indicators for measuring decentralization is the redistribution of the share of public finances between the central and subnational (sub-national) levels. For example, in developed countries (OECD), an average of 20 to 40% of all public finances are local-level own revenues. In Switzerland and Canada, redistribution is more than 50%. At the same time, 50% of all public sector investments are made locally in EU countries. Spain, Sweden, Germany, etc. is 70-75% (Counseling and Training Center (CTC), 2019).

The regional development policy vector has changed substantially since the 1980s, and more emphasis has shifted to endogenous and endogenous development. These approaches were based on the belief that a full understanding of the region's potential and effective use is crucial for regional development. This approach views regional development as a bottom-up stimulated process. The endogenous development approach emerged as the opposite concept of central development. It was overly focused on local factors and processes and ignored the reality that

successful regional development is usually the result of the combined influence of local processes and external factors (Pike A., Rodriguez-Pose A., Tomaney, J., 2006).

### 3.2 The concept of local self-government

Due to the importance of local self-government, a number of states define the concept of local self-government by international legal or domestic legal acts, which is essential for the further introduction of the principles of local self-government. In the notion of local self-government defined by a legal act, the content and meaning are realized and endowed with legal force. The concept defined by the legal act forms the legal basis of the society and the state.

In the scientific literature, the term "local self-government" was established in the seventeenth century and was defined as the right of persons living in one territory to solve their own problems and challenges independently, to create opportunities independently.

In the scientific literature or normative acts, the term "local self-government" is used in different words. For example, the English text of the European Charter on Local Self-Government uses the word "Local Self-government", and the French text uses "local autonomy" (European Charter of Local Self-Government, 2013). Similar terminological differences are observed in the legislation of other countries. England uses "local self-government", Portugal, Italy and Spain use "local autonomy", the United States uses "local government", and Poland uses "self-governing territories."

The Cambridge English Dictionary offers an interesting definition of "autonomy" as "the right of an organization, country or region to be independent of external control and govern itself independently. Finally, it is possible to use these terms as synonyms for the local self.

According to the Local Self-Government Code of Georgia - local self-government is the right and opportunity of Georgian citizens to resolve issues of local importance through local self-government bodies in accordance with the interests of the local population (Local Self-government Code, Article 2, 2015).

European Charter of Local Self-Government defines the concept of local self-government, where "local self-government means the right and ability of local authorities to regulate and manage a significant part of public affairs within their responsibilities and in the interests of local people (European Charter of Local self-government, 1985)(Article 3).

One of the main issues reflected in local self-government theories and subsequently influenced the definition of the concept was the definition of independence and autonomy in local self-government. The nature of definitions expressed by various authors on the concept of local self-government can be used to classify them. The term's normative definition emphasizes local self-government and its bodies' selectivity and lack of bureaucracy.

The definition of self-government is often associated with participatory democracy, which involves the involvement and participation of citizens in the governance process. Involvement can be both direct and indirect, as well as indirect. Participation in self-government envisages the independence of the population and the ability to make decisions independently - to solve problems on their own responsibilities.

Prominent English philosopher of the 19th century, John Stuart Mill, explained the importance of local self-government as follows: Local democracy allows citizens to express their freedom and specificity in a form and dose that does not allow and interest the central government, which is close to the decentralized local population and knows better about their needs. That is why local elections are important because local bodies will be focused on the interests and priorities of the population. (Magnusson, W., 2005).

According to Alexis de Tocqueville, a prominent French diplomat, historian, and political scientist of the 19th century defined self-government as "self-government paving the way for freedom and teaching the population to enjoy freedom." (A. D. Tocqueville, 2012)

In Tocqueville's opinion, the power of a free nation begins with the municipality and people's sovereignty - "the principle or dogma of people's sovereignty." Self-governing units allow people to pursue their own interests. According to Tocqueville, political and civil society in the United States rely on this agreement: "Providence has given to each individual, whomever he may be, the degree of reason necessary for him to be able to direct himself in things that interest him exclusively. Such is the great maxim on which civil and political society in the United States rests. Extended to the entirety of the nation, it becomes the dogma of the people's sovereignty" (A. D. Tocqueville, 2012).

Lorenz Stein (author of the legal theory of governance) and the German lawyer G. Elinek. in their work, the self-governing populations are seen as more effective than the state bureaucracy in

solving local problems. Only by self-organizing, active populations can local problems be solved effectively.

Given that the topic is about Georgia, the author thinks it is important to discuss the opinions of Georgian public figures, where many Georgian public figures spoke about the importance of local self-government.

In the author's opinion, Iliia Chavchavadze was one of the greatest Georgian and patriots. He believed that local governments could contribute to the creation of civil society. Iliia wrote: "Such a government increases the prosperity of the country, awakens the people and clears the mind because it awakens the joy of public care and trains for public affairs." (I. Chavchavadze "Publicist Letters", 1987).

In Iliia's view, local governments perform the auxiliary functions of the central government through redistribution of functions. A decentralized government is more efficient than a centralized government (I. Chavchavadze "Publicist Letters", 1987).

Another prominent Georgian public figure, Niko Nikoladze, wrote about the necessity of establishing local self-government as a democratic institution. He viewed local self-government as a form of public government. The big thinker was dissatisfied with the style of public administration, mistyped revenues, and even more misspent revenues. Most notably, he emphasized the election of a city governor by a particular community, who would then effectively determine and spend the local budget based on a problem-oriented approach (N. Nioladze, 1963).

When discussing local self-government, Niko Nikoladze focused on financial and property issues and considered that its main function was to represent a specific population and an institution regulating local affairs. For him, a natural and independent institution is perceived as local self-government, which aims to resolve local issues with the local population, enabling him to develop, proper form, and adapt to the needs of the local population. For the proper management of local self-government activities, it is necessary to have people in the government who will put the needs of the city before their own interests and effectively plan the city budget and adapt it to the general needs of the population (N. Nioladze, 1963).

Niko Nikoladze also talks about decentralization were mentions that if the central government in the country uses all the possibilities of power and interferes in the affairs of regions and

municipalities and increases bureaucracy and centralization, then the regions and municipalities do not have local autonomy and ability to manage and decide the issues before them. Will not have decentralization (N. Nioladze, 1963).

The most exciting thing is that both those mentioned above, Georgian, or foreign public figures and great thinkers, think about the importance of local self-government. Although they talk about the importance and significance of local self-government, the content is the same, and they feel absolutely the same about what is vital for this living institution. First of all, it should be noted that the principle of restriction, decentralization and redistribution of political power is considered a democratic step in the modern era because the unrestricted use of power by the central government and interference at all levels is detrimental to the country and loses democratic governance.

With the above approaches, when speaking about local governments, the effectiveness of government and the exercise of power by the population are emphasized, which increases the number of rights and freedoms in society and increases citizens' participation in planning and resolving local issues.

Based on the above definitions of local self-government, autonomy, and decentralization, it can be concluded that in terms of local autonomy and real freedom, local government, which has its own revenues, is more accountable to the population and the budget is fully spent, which fully enhances local democracy and overall Describes the general economic-political picture of the country positively.

### 3.3 The concept of E-government

The 21st century is rightly considered the era of digital technologies (S. S. Bisen, 2018). Internetization and computerization have fully covered the modern world and have taken an important place in all areas of human life (Wellman, B., 2002). It can also be said that the world has become dependent on digital technologies. The Internet has permeated all spheres of public activism, including the state governance process (William H. Dutton, Malcolm Peltu, 2005, pp. 63-81).

The Internet has become an important tool in daily life, and the online opportunity is fast growing in any industry direction. In this regard, state institutions need to offer e-services to both the private sector and the local population to save time, finances, and other benefits.

In modern, developed societies, the role of this global network in the governance process is constantly rising (Polat, 2005) Authorities are trying to make the most of digital technologies and thus promote the introduction and development of "Good Governance" principles such as accountability, efficiency, transparency, etc. Different states offer many e-services to their citizens (Goede, 2019). This may be the electronic submission of reports on state programs to citizens, or the conduct of universal democracy, the most outstanding achievement of modern democracy, through universal and fair elections (Vassil, K., Solvak, M., Vinkel, P., & Alvarez, R. M. , 2016). The Estonian State Portal eesti.ee provides more than 200 public sector e-services, more than 400 information articles and contact information of more than 2000 governmental and local agencies and institutions in three languages.

According to the most common definitions, e-government is "communication between the state and local citizens using modern digital technologies" (Koh, C. E., Ryan, S., & Prybutok, V. R., 2005). However, it is not appropriate to include this concept only in the narrow framework of communication between the society and the government, as e-government also includes internal communication between the state and business and the state institutions themselves (Alshehri, Drew, Steve, 2010), which is carried out using digital technologies.

A considerable amount of literature indicates that e-government can significantly facilitate and motivate citizens to interact and engage with the local government frequently. This is particularly true in COVID-19, when face to face contact has been restricted since early 2020, and most of the exchange, services and communication are expected to be delivered online/ via digital tools or distance methodologies. As in all areas, the global pandemic has touched upon the citizen-government interaction, and e-governance can be considered one of the opportunities in this regard – one could argue that e-communication tools could be a way out in the context of global health and economic crisis. Indeed, while mentioning citizens, the author also means entrepreneurs and private sector representatives.

The general view of e-government as a digital way of communicating between government and society is mainly suited to the G2C (Government to Citizen) form of e-government. Furthermore, there are two different models of e-government - G2B (Government to Business) and G2G (Government to Government). Although the given models are drastically different from each other,

all three serve the same purpose - to increase public administration's transparency, accountability, and efficiency (Nam, 2014).

Overall, it can be said that e-government is the digitization of all aspects of public administration, including both G2C and G2B forms, and this master's thesis focuses on aspects of G2C e-government and the involvement of population and citizen participation.

### 3.4 G2C and E-participation

In public administration, the G2C concept is used for expressing the relationship with citizens. In any life situation, the relationship may refer to a citizen's request for information or the transfer of official documents to the citizen. Usually, this abbreviation refers to an ICT technology that converts public and private entities into an electronic format or a service that simplifies communication between citizens and their representatives (e.g., official website, service catalogue).

In many cases, the digital form of government-citizen relations is also called "e-democracy". So, the author thinks it is right to consider what democracy is and its types. The term "democracy" means "the people's rule", meaning power. Democracy is a political system in which the people are the rulers.

The problem of democracy today is as acute as ever. In developed democracies such as (Europe USA), one demands even more democracy, while the other spares no effort to fill the deficit of democracy. In post-totalitarian countries, which strive for democracy, the debate is over which existing institutions we should use to establish a "true" democracy that is stable, solid, and effective. The influence of democratic ideas is especially evident in the nations and peoples who learn to live in freedom.

In these definitions and science in general, everything is clearly defined. However, it is used relatively differently in real life and practice. After the definition of democracy, the question arises, who are the people and what forms of people's participation in state affairs should be considered?

If we become deeper into democracy, the question of governance also arises as to how wide the range of governance should be? Should it limit the questions of government powers? Furthermore, many other issues of democracy and governance are still relevant in the selected country.



Historically, there have been many types and modifications of democracy. There are three main types of democracy:

- I. Representative multiparty democracy.
- II. Representative one-party democracy.
- III. Joint democratic governance or direct democracy.

Representative democracy means that decisions that affect people's lives are made not by all members of society but by representatives explicitly elected for that purpose. Representative democracy in state governance is manifested in elections to parliament, Congress, and other similar national-state bodies. This category includes the USA, Western European countries, Japan, Australia, New Zealand, and some developing countries.

The nature of democracy is best expressed in liberal, multi-party democracies, but in countries such as the former Soviet Union, many countries in Eastern Europe and the Third World (less developed or developing) where only one party (e.g., China) was legalized, also attributed and attribute themselves to several democracies. However, voters were not allowed to choose between several different parties, although elections were held, and elected representatives were appointed locally or nationally.

E. Giddens rightly notes that this so-called. People's democracies have a definite anti-democratic orientation. The basis of representative one-party democracy is the belief that one party represents the interests of the whole society. According to Marxists, in liberal democracies, parties reflect and express the interests of a particular class, whereas, under socialism, it was believed that there were no antagonistic classes.

Joint democratic governance, i.e., direct democracy - decisions are made by everyone to whom it concerns. Direct democracy originated in ancient Greece, where eligible citizens constituted a minority in society, and it was not difficult for them to gather regularly in the square to discuss political issues and make serious decisions.

Jean-Jacques Rousseau supported a similar type of democracy. Moreover, today, when a significant part of society has political rights, and each member of society cannot objectively take an active part in political decision-making, direct democracy is virtually impossible, nor can it play

an essential role in governing society. Nevertheless, some of its elements are still used today in modern democratic systems, and a referendum is one of them.

In the twentieth century, elements of participatory political culture have grown in Western societies (Bevir, M. , 2008). People were becoming more interested and engaged in politics, the citizens were trying to influence government processes, a variety of groups and civic associations were appearing, and technology was "catching up" with the growth of politics. It has made it possible to form a more flexible and participatory form of democracy - "e-democracy".

In the modern sense, E-democracy is an "addition/extra" to the traditional form of government (Qvortrup, 2013), which allows the digitization of certain parts of public services and thus increases the flexibility, efficiency, and transparency of the governance process. Developed technologies and the Internet have allowed society to become more involved in governance and made the world more "compact" (Castells, 2014).

Using modern technologies, any citizen can be involved in the state's current political or social processes, openly express their opinion, participate in inquiries, submit an initiative, or use government e-services. Effective e-Government can provide a wide variety of benefits, including more efficiency and savings for governments and businesses, increased transparency, and greater participation of citizens in political life.

Digital technologies have made it possible to implement small-scale "direct democracy" (C. Toregas, 2001), allowing citizens to determine the policies of their cities or settlements through virtual "squares", at least e-government allows.

E-government from a G2C perspective maximizes efficiency and flexibility in communication between government and the public (Koh, C. E., Ryan, S., & Prybutok, V. R. , 2005). Citizens may participate in political processes electronically with the proper use of electronic services. E-participation is one of the cornerstones of e-government (Macintosh, A., 2004). Accordingly, developed democracies are trying to refine this aspect.

Citizens' participation in government decision-making in any form increases the transparency and accountability of the process (Nawafleh, S., Obiedat, R., & Harfoushi, O., 2012). Additionally, if citizens believe that e-participation is the method by which they vote for the government, they are more likely to use this method to communicate with the government (Liu, 2018). As a result,

modern technology enables the state to understand the needs of its citizens better and at the same time, society is allowed to make a significant impact on the resolution of an issue of interest to them.

It is also essential to engage electronically in the political decision-making process, which improves citizens' civic responsibility and awareness of a specific public issue, the most crucial tool for a democratic state's operation. Citizens have a better understanding of why and how they should be involved in decision-making, enhancing the community's political culture and governance, and making governance more effective (Watson, R. T., & Mundy, B. , 2001).

One more advantage of e-participation is the high legitimacy rate of political decisions made (E. Wihlborg,, 2014).When citizens participate in the political decision-making process, the government finds it much easier to implement the decision because society becomes an accomplice in the decision-making process and feels responsible. Furthermore, the populace trusts the institutions it regards as the expression and conductor of its own interests.

ICT is already widely used by government agencies, as in enterprises, but e-government involves much more than just tools. It also includes reviewing organizations and processes and changing behaviors to make public services more effective for people. Well-established e-government allows citizens, businesses, and organizations to do their business with the government more easily, quickly, and cheaply.

#### 4. An overview of Georgia's e-governance practices

This chapter provides an overview of the case by dividing it into two sub-chapters. The first sub-chapter is dedicated to studying and evaluating G2C e-government in Georgia. To achieve this goal, information was obtained and systematized from various sources. A historical comparison method is used to study e-government development trends in Georgia, how it has reached its current level, how it has moved towards digital governance, what challenges it faces, and how service delivery has changed from traditional to digital means. This part of the master's thesis analyzes the action plans and strategies developed and implemented within the Open Government Partnership (OGP) framework, which is based on e-government policies.

Every two years, the UN publishes updated results of its e-government survey, which is considered the most comprehensive and influential in this field. The study analyzes the development trends

of e-government in all member states of the organization. Therefore, the data obtained in the second subsection is used to determine the current state of Georgia's e-government.

#### 4.1 Overview of Georgia's e-Government within the framework of the Open Government Partnership (OGP)

Proper e-portals and e-services are critical components of e-government development. Georgia joined the Open Government Partnership (OGP) International Project in 2011 to increase transparency and accountability in the governance process of the member states, and the essential tools for this are modern technologies and e-services. Most of the state digital services introduced in the last ten years have been defined in these documents.

Under the OGP project, Georgia aimed to address the following challenges:

- I. Improving public services;
- II. Increasing trust in the public sector;
- III. Better management of public resources;
- IV. Creating a safe environment.

Georgia developed and successfully implemented four action plans after joining the partnership in collaboration with civil society (OGP Georgia, 2012-2019). Dozens of e-services have been more or less successfully implemented as part of the action plans, which have played a significant role in the country's e-government development. Georgia has been prepared to implement measures in all four challenges concurrently since 2012 as part of the OGP partnership.

**The first challenge**, "Public Service of the Future", consisted of several aspects; the responsibilities of the challenge, which are components of e-government, are listed below:

In the development of the process, the challenge of "introducing e-government in local self-government" included two directions: 1- Integration of pilot municipalities in the e-government system and 2- Opening of community centers in municipalities. According to the action plan implementation report, the first direction of this Commitment has been partially fulfilled. A significant step forward in this direction was introducing an electronic document circulation test system in 5 municipalities, which dramatically simplifies the process of providing services to citizens. The government also opened community centers equipped with modern technologies in

12 additional municipalities, where qualified staff assist citizens in using new technologies and utilizing desirable services. The second requirement mainly was met.

For the last few years, the Public Service Development Agency, a legal entity governed by the Ministry of Justice, has been actively working to increase the capacity of municipal governments. Using modern information technologies, the Georgian government has implemented a number of significant reforms in the public sector. The Public Service Development Agency created the concept of a community center during the first phase of the project. It allows the population to use the services of more than 200 public and private sectors without leaving the village.

The State Service Development Agency, the National Archives of Georgia, the National Agency of Public Registry, the Social Service Agency, and the Agricultural Logistics and Services Company Ltd. provide services to community center users. MagtiCom and Liberty Bank are two private companies in the center. There are currently 88 community centers located throughout Georgia (Community Centers , 2021).

The launch of the citizen portal - My.gov.ge - was a turning point in the evolution of Georgian e-government (My.gov.ge, 2012). The portal was launched in 2012, and in 2013, it was expanded to include 50 state services and up to 80 utility bills. Citizen's digital portal - this is the first step in the process of introducing e-government because it is impossible to systematize and integrate the state's existing e-services without it. This Commitment has been fully met, according to the OGP Action Plan Report 2012-13.

Furthermore, the plan for 2014-15 aimed to increase the number of services integrated on the portal by 10% and the number of users by 15%. The portal received two electronic services during the reporting period: the Debtors' Registry and the Search in the Debtors' Registry. Personal information, municipal services, business, permits and licenses, co-financing, transportation, social services, property, taxes, fines, utility bills, and other services, for example, make it easier for customers to select the service they want. Mobile users were also given the option of electronically requesting information from various government agencies.

The introduction of digital signatures and online authentication was an innovative commitment of the 2014-15 Action Plan. According to this paragraph, the state should implement an online authentication service, for which the development of an electronic identity card and secure authentication mechanisms embedded in it was a necessary precondition. The development of

digital signatures and stamps (for organizations) was considered under the same Commitment, which would significantly improve electronic document management systems.

According to the action plan report, the following steps have been taken to fulfil this obligation:

- ID cards with digital signatures and authentication were renewed on ID cards, allowing some government agencies to use this service;
- A framework of the draft law "On Electronic Signature and Electronic Document" was developed, and work began to submit to the Parliament;
- Work on a digital stamp (electronic seal for organizations) project for software and hardware support began.

As the system became technically and programmatically operational and organizations began to use it, the obligation to "digitally sign and introduce online authentication" was primarily met, although the service could not be fully operational.

In 2013, 23 new modules were launched on the Ministry's official website [www.ehealth.moh.gov.ge](http://www.ehealth.moh.gov.ge) in the Commitment framework - "Improving Health Care Services," which connected the actors working in healthcare. This obligation, however, was only partially met because it failed to prepare modules for electronic registration of medical service users, electronic medical histories, medical services, and pharmaceutical products and to attach them to the website.

One of the 2016-17 Action Plan objectives was to double the number of site visitors. Although the citizen portal [My.gov.ge](http://My.gov.ge) provided personalized social security services, according to the OGP Action Plan Report 2016-17, this obligation was only partially met, as the concept of mobile and modules was still in development at the end of the reporting period. In addition, work on a technical assignment.

**Challenge II** - Increase public engagement through the implementation of e-services such as:

- The activation of portals such as [Data.gov.ge](http://Data.gov.ge) and [Ichange.ge](http://Ichange.ge); Proactive disclosure of public information;
- Transparency in political party finances;
- Citizen participation in legislative power;

The first commitment of the given challenge was to create and launch state electronic portals - Data.gov.ge and Ichange.ge. According to the action plan, Data.gov.ge should be the state open data portal, and Ichange.ge - the state e-petitions portal.

In the framework of the first action plan, the website - [www.data.gov.ge](http://www.data.gov.ge) - was launched in October 2012, but due to a lack of significant work, the site could not function with a load, and the electronic petition portal - Ichange.ge - is also running.

This commitment was identified as one of the further action plan's priorities. The state open data portal - [data.gov.ge](http://data.gov.ge) - was created and launched in the following period (2014-15), but with some flaws. Ichange.gov.ge, the e-petitions portal, was not created in the context of the action plan for 2012-13, and it could not be prepared and launched during the 2014-15 action plan for the following years. However, the site was launched in 2018.

One of the commitments fully fulfilled under the 2012-13 Action Plan is the transparency of political party finances. This paragraph called for creating a report form on which political parties could submit information on any type of financial income or expenditure. Sixty parties submitted the document in 2013.

The 2014-15 Action Plan aimed to improve the current situation and present existing data more flexibly, allowing stakeholders to process it. This obligation has been fully met, as the publication of information and statistics provided by political parties on the State Audit Office's website began in 2015 in the form of Excel spreadsheets.

This pledge adheres to OGP principles such as accountability and transparency. The digitization of this service has been critical in the development of Georgian e-government, as the public has been able to use digital technology to control the financial activities of political elites, increasing democracy in the country.

Citizen participation in legislative power is the third commitment of the second challenge of the Action Plan for 2012-13, which is aligned with digital technologies. According to the document, any Georgian on the Legislative Herald's website ([www.matsne.gov.ge](http://www.matsne.gov.ge)) would be able to comment on legislative acts or any article of the bill, criticize, evaluate, and/or submit their own initiatives. According to the plan, a special commission would respond to citizen comments or initiatives.

Although the site - matsne.gov.ge - was technically operational, this obligation was only partially met because it was not possible to form a special team to respond to citizen activities.

The commitment of the Ministry of Internal Affairs to "create a website adapted for people with disabilities" was one of the innovative initiatives of the 2014-15 Action Plan. According to this criterion, the Ministry of Internal Affairs' official website should be accessible to people with disabilities, and an online consultation mechanism should be posted on the website.

According to the 2014-15 report, this point of the action plan was one of the fully met commitments. In 2014, a particular version of the Ministry of Internal Affairs website, www.police.ge, was created that could be used by the blind (via the voice function) and the visually impaired. Furthermore, an online communication service was made available on the website, facilitating communication between citizens and the ministry.

**Challenge III** - Better management of public resources - included two responsibilities: implementing an electronic procurement system and electronic declarations. In turn, the electronic procurement system's commitment, according to the action plan, included the establishment and operation of the following electronic portals:

- www.procurement.gov.ge - Improving the electronic public procurement system;
- www.eauction.ge - Electronic system of state auctions.

Georgia has successfully implemented a system of public procurement and auctions, according to the OGP Action Plan Report 2012-13. Although the obligation mainly was met, the mechanism of price and quality balancing in procurement, which was written as one of the plan's points, could not be developed.

According to this paragraph, the public procurement tender was to be conducted using a unified electronic system. To accomplish this goal, an innovative electronic model was developed as part of the action plan and was implemented in the electronic state procurement system (tenders.procurement.gov.ge). According to the report, this commitment has been fully met, as 12 tenders were announced electronically via state e-procurement in 2015.

The development of an electronic system in municipalities was also included in the action plan for 2014-15. The commitment - "Development of an electronic system of human resource management in public service" - specifically called for implementing the program E-HRMS9 (E-



human resource management system) in pilot municipalities. The program mentioned above was implemented in 17 LEPLs and four municipalities as part of the project, and this requirement was only partially met.

Implementing an e-declaration system is an essential step in the process of state democratization because it addresses "good governance" principles such as transparency and accountability. According to the action plan report, this obligation was mainly met because the system, implemented in 2010, was operational, and more than 40 thousand declarations were uploaded during the reporting period.

**Challenge IV - Creating a Safe Environment - Combining three Commitments:**

- Electronic criminal proceedings and electronic statistics - Under the obligation, criminal proceedings should be fully transferred to an electronic system, involving the courts as well.
- Crime map - According to the obligation, the relevant authorities must create a map on which all registered crimes in the region are displayed.
- Safe zone - an obligation to create a portal - [www.igov.ge](http://www.igov.ge) - that would allow any person to be electronically informed about problems in his area to the appropriate agencies.

For various reasons, the given commitments, which were identified in response to the fourth challenge of the OGP Action Plan 2012-13, could not be met during the reporting period. The fourth challenge of the 2014-15 Action Plan, creating a Safe Environment, included two commitments: the development of alternative 112 channels and interactive crime statistics and criminogenic mapping.

Commitment - in the context of the "creation of alternative channels of connection to 112," the so-called GPS tracker served as an additional means of connecting to the emergency service. Appropriate software was also introduced to enable continuous satellite signal reception. Additional services have been launched for deaf citizens, most notably the ability to connect to "112" via text message and video call since 2015. According to the results of the 2014-15 OGP report, this commitment has been fully met.

The second obligation of the fourth challenge of the action plan, which envisaged the creation of an "interactive statistics and criminogenic map of crime", was only partially fulfilled. According to the plan, by the end of 2015, a site with interactive statistics and a criminogenic map of crime

should have been launched. However, the measure implemented in this direction includes only an ordinance of the Georgian government, which allowed the relevant government agencies to purchase GPS devices in a simplified manner.

## 4.2 Assessing and measuring the progress of the Georgia e-government

### Development Index based on the relevant UN indicator

To describe the current situation of e-government in Georgia, the author used both international and local surveys. In this regard, it is noteworthy that the UN study on e-government, which includes all member states and analyzes e-government trends, which allows us to uniquely determine the rating and level of general e-government in the country. However, it should be noted that it is not possible to describe the actual situation based on UN data alone. This type of analysis is not comprehensive and focuses only on reflecting specific data and not identifying the reasons for delaying or facilitating e-government. Despite the shortcomings of this subsection, the author considers it appropriate to use the general picture, rating and e-government quality dynamics data by years.

It is possible to compare different states or state agencies using the methodology used in the UN study. There are three different directions to determine the general e-government index, which receives data from different organizations. The current situation in Georgia is examined from the perspective of UN e-government in this sub-chapter of the master's thesis.

- 1) ICT Infrastructure - The data is mainly based on the International Telecommunications Union (ITU) reports.
- 2) Human capital - the data are based on UNESCO reports. Based on various data, determine the extent to which the public has the ability and knowledge to use the offered electronic services.
- 3) Existing e-services in the country - information is based on data obtained by independent experts from the United Nations Department of Economic and Social Affairs (UNDESA) due to the analysis of government portals in the country.

The e-government resources of the countries participating in the UN study are divided as follows:

- Basic - there is a state portal, but only of a facade nature and does not actually function;
- Informative - there are state portals, which are mainly informative only;

- Interactive - The state offers various types of electronic services to citizens in areas such as: education, health, labor/employment, social services, financial services;
- Transactional - Citizens, through e-government, are involved in the decision-making process and can initiate themselves.

### **Online Services Index (UN)**

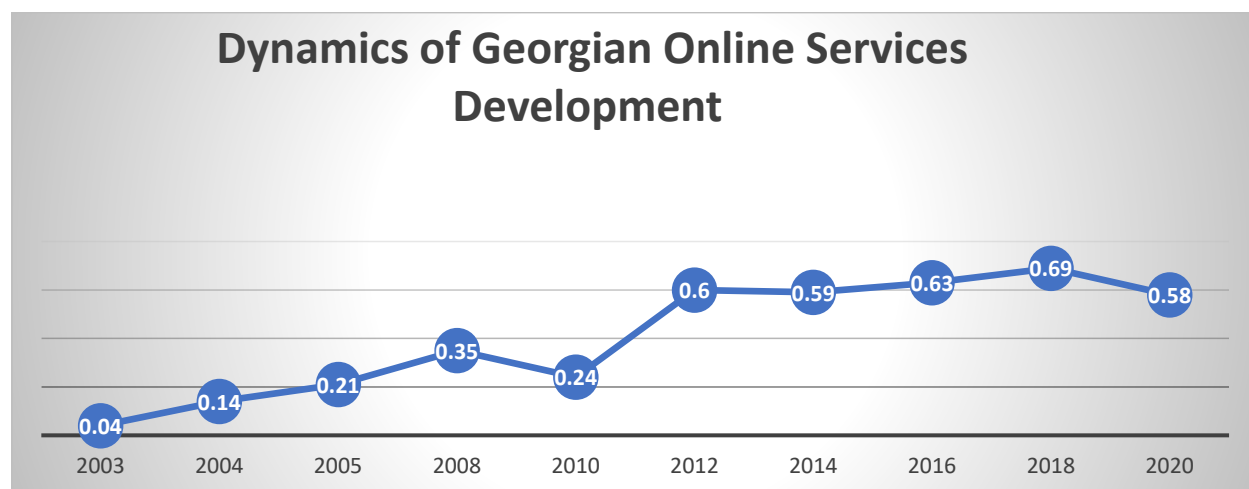
The Online Service Index (OSI) is one of the areas of UN e-government research, which is based on a special questionnaire (OSQ). The results were obtained to determine the state e-services index, which affects the overall development of e-government. Local experts assess each country according to a pre-designed universal questionnaire with the following indicators:

- I. Level of public awareness of e-services - they examine how different types of information can be found on public portals.
- II. A list of various digital services available in the country - UN experts determine this indicator by assessing whether citizens have access to important public services. Can a citizen use the Internet to find information about services in the country, such as state policy, health, or employment, etc. This fact underscores the importance of access to information in the e-government development process.
- III. Evaluating state e-services - how government portals allow people to conduct various operations electronically. For example, online registration of income and other taxes, online requests for data, online registration of the vehicle, Business registration online, etc.

According to local experts, more than 100 factors determine a state's "electronic capabilities.". The given questions have sub-questions in case they are evaluated positively. A researcher can evaluate the state of e-services in his country with a maximum of 140 indicators and determine the index of online services of a specific country based on the obtained data, which ultimately determines the e-government rating of UN member states.

During the nearly 20 years of the UN e-government survey, all the indexes Georgia received were analyzed. The obtained data were visualized and presented in the form of diagrams. The figure N1 below shows the dynamics of the Georgian index of electronic services according to the results of 2003-2020.( (UN, 2003), (UN, 2004), (UN, 2005), (UN, 2008) (UN, 2010), (UN, 2012), (UN, 2014), (UN , 2016), (UN, 2018), (UN, 2020)(these Figures were generated by the author based on the UN survey 2003-2020)).

Figure 1 Dynamics of Georgian Online Services Development



As the diagram shows, from 2003 to 2020, Georgia's e-services index was developing almost symmetrically, except for the 2008-2010 survey data resulting from the Russian occupation. According to 2012 data, Georgia has made unprecedented progress in developing e-services. In this period, Georgia joined OGP, and an action plan for e-services introduction was implemented, which was reflected in the country's e-services development index.

The latest research indicates that the country's e-services development has attained a high level with a maximum score of 1 - 0.7 points, joining a list of countries with high levels of e-services development. It should be noted that the study does not specify what type of e-services we are talking about or how frequently consumers use those services.

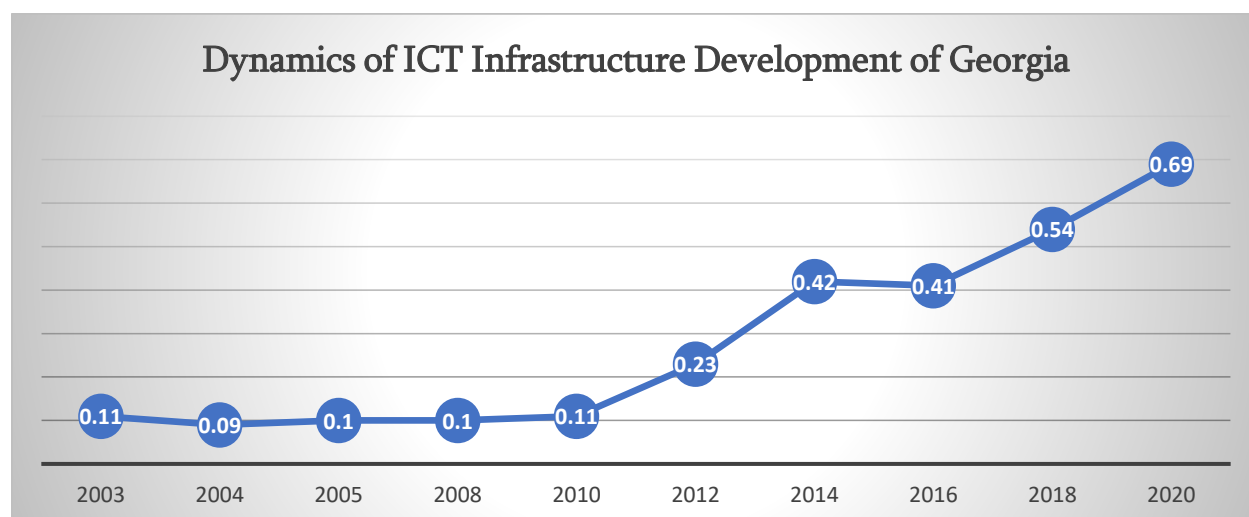
### ICT Infrastructure Level (UN)

The second indicator that determines the e-government index is the state's quality of communication infrastructure developments. This indicator is defined based on five sub-indicators:

1. The number of Internet users per 100 people. Citizens who have used the Internet anywhere in the country during the last three months are registered;
2. Number of fixed telephone line users per 100 people;
3. Number of mobile phone users per 100 people;
4. Number of mobile internet users;
5. The number of fiber internet.

Figure N2 below shows the dynamics of ICT infrastructure development in Georgia from 2003 to 2020.

Figure 2 – Dynamics of ICT Infrastructure Development of Georgia



Based on these data, the development of ICT infrastructure in Georgia actually started only in 2012. As mentioned above, this is the period when Georgia started implementing the OGP Action Plan, which may be one of the main factors contributing to the improvement of the ICT situation in the country from 2010-to 2012. In addition, from the mentioned period, the spread of fiber-optic internet began in Georgia, and later, the development of mobile internet began. According to the latest UN survey, the ICT infrastructure index in Georgia is estimated at 0.69 points. (It should be noted that in the process of collecting this data, the UN itself is guided by secondary sources).

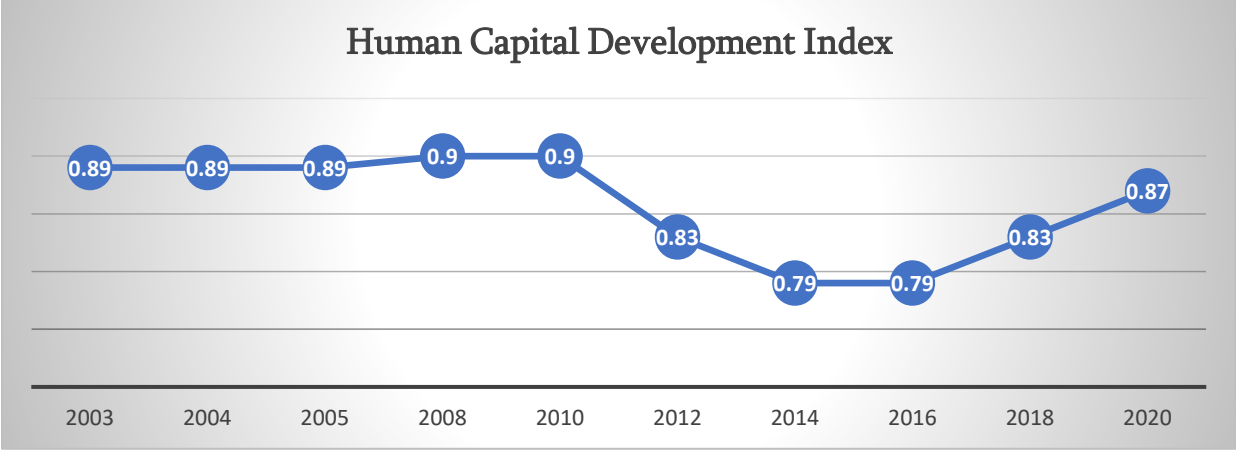
### **Human Capital (UN)**

The third key indicator by which the UN sets the e-Government Development Index of the world is human capital. This is an indicator of how many potential users of e-services there are in the state. This indicator is determined based on the analysis of four components as a whole:

1. Level of education of adults - Percentage of citizens over 15 years of age with literacy skills;
2. The ratio of the number of students enrolled in primary, secondary and higher education to the total number of citizens of the same age;
3. The ratio of the expected duration of training with real data;
4. The average rate of time spent in the school by the population above 25 years.

According to the UN study, Georgia has a much higher score according to this e-government indicator compared to the previous two indicators. According to the N3 Figure below, from 2003 to the present, human capital was the only indicator by which Georgia was ready for e-government.

Figure 3 – Human Capital Development Index

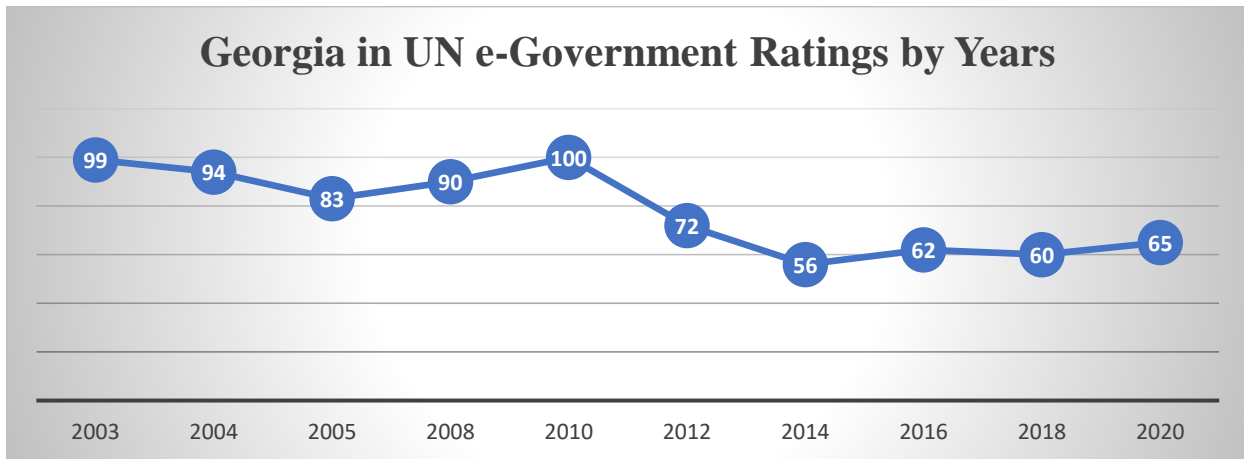


As in the case of ICT infrastructure data, the UN relies on data from secondary sources. Changes in the research methodology caused the change observed in 2010-2014. More specifically, the third and fourth sub-indicators were added to the first two sub-indicators used to measure human capital in the country, which led to a noticeable change in the figures shown in the diagram.

**General Index of e-Government Development in Georgia**

To determine the general e-government index, the UN e-government study combines the indexes of the components discussed above and derives general data. The Figure below N4 visually presents the dynamics of the changes experienced in the e-government rating of Georgia.

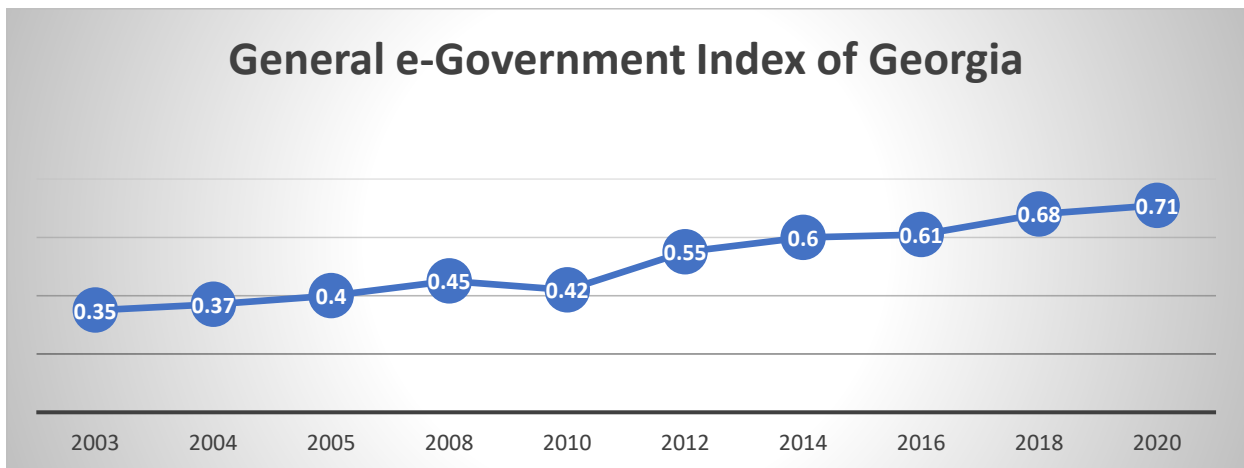
Figure 4 – Georgia in UN e-Government Ratings by Years



This figure N4 clearly shows the change in Georgia's rating over the years. Significant progress has been made in the 2010-12 rankings, as the country has moved up 28 places at once. However, there has been no noticeable change in Georgia's ranking in the last six years, and according to the latest 2020 survey, Georgia ranks 65th (UN survey , 2020, p. 316).

According to the e-Government Development Index, the country has made steady progress. The Figure below N5 visually presents the dynamics of the changes in the e-government index of Georgia.

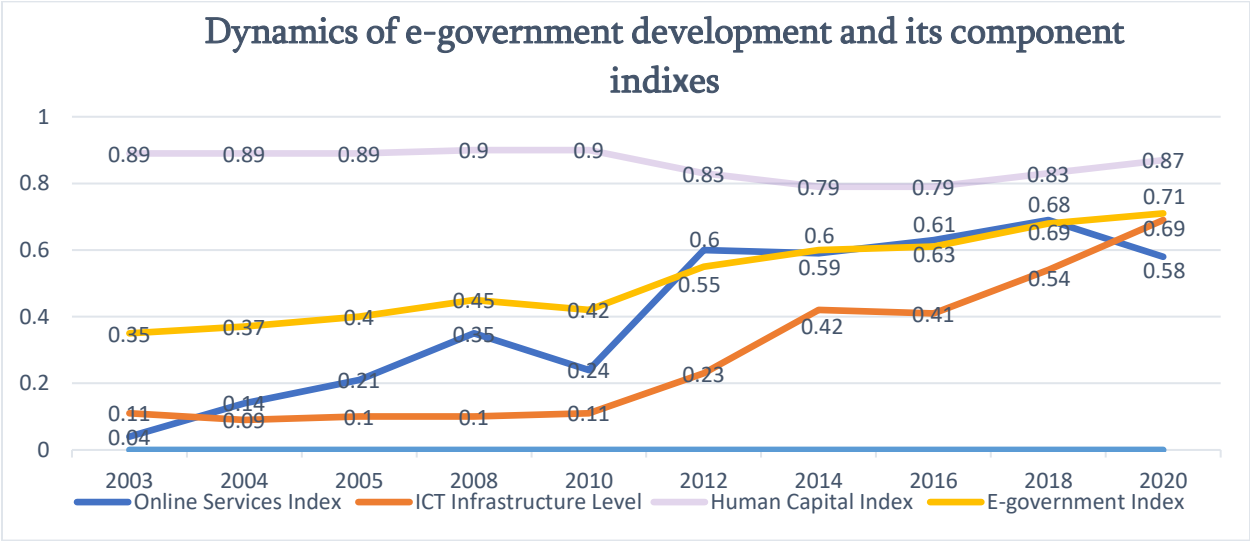
Figure 5 – General e-Government index of Georgia



This figure N5 clearly shows, that the only case in which the country's e-government development index has recovered is the 2008-2010 report, which covered the period of the 2008 cyber-attack when many Georgian government portals were shut down.

In summary, it can be said that all three indicators have a significant impact on the e-government index of the country. However, to determine the role and importance of each of them, it is necessary to reflect the data of each component on a single diagram. Figure N6 includes the general indices of development of Georgian online services, ICT infrastructure, human capital, and e-government according to the data of 2003-2020.

Figure 6 – Dynamics of e-Government development and its component indexes



As shown in the summary figure N6, in 2003, there was virtually no e-services and ICT infrastructure in the country. If the development of online services has been rapid over the years, the real progress of the communication infrastructure will be observed only from 2010. As for the third component - human capital, the country was in a better position in this regard from the very beginning. Since 2003, the UN estimates that Georgia has the high human capital to implement e-government successfully.

As shown in the figure N6, there is an interesting correlation between online services and the general e-government development index. 2008 was a year of sharp declines in online resources, which impacted the overall e-government development index. With the launch of the OGP Action Plan by the state in 2010-2012, the index of online resources also increased, which in turn led to an increase in the index of e-government.



## 5. Interview, Questionnaire and Survey Outcome

Empirical data provided in this chapter has been collected through interviews with the Georgian local self-government representatives. According to the research objectives, a specific questionnaire was developed, as well as an in-depth survey, for which the Samegrelo Upper-Svaneti region of Georgia was taken as a specific case study. Six municipalities interviewed representatives from nine municipalities. The list of the questions is provided in the appendix N1. The recordings and transcriptions are available can be provided upon request. A total of 7 interviews were conducted in 6 municipalities, including:

*Table 3 - Interviews in the following 6 municipalities*

<b>Municipality</b>	<b>Position</b>	<b>Name, Surname</b>	<b>Interview length</b>
<b>Zugdidi Municipality</b>	Chairman of the Legal Committee of the City Council	Sandro Sordia	48 minutes
	Chief Specialist of the Public Relations, Media, and Non-Governmental Organizations	Giorgi Chikovani	
<b>Martvili Municipality</b>	Head of the Human Resources Management and Case Management Department of the Administrative Service of the City Hall	Tamar Tsivtsivadze	26 minutes
<b>Abasha Municipality</b>	Head of the Administrative Service of the City Hall	Dimitri Tsanava	21 minutes
<b>Senaki Municipality</b>	Head of the Administrative Service of the City Hall	Nana Zarandia	33 minutes
<b>Chkhorotsku Municipality</b>	Head of the Public Relations and Citizen Services Department of the City Hall	Inga Papaskiri	19 minutes
<b>Khobi Municipality</b>	Head of the Administrative Service of the City Hall	Zviad Bukia	18 minutes

By conducting in-depth interviews with respondents, the author was able to explore key trends and state policy gaps, identify the current situation, and determine their readiness to implement e-services. I was able to easily obtain feedback from respondents by conducting in-depth interviews, especially since the target audience was less accessible to me at this point (because of the distance).

The quantitative questionnaire is constructed within the research based on the research objectives. A quantitative survey of 205 people was conducted. The results obtained from the sample design and lack of volume help us identify trends. Statistics Analysis Program SPSS processed quantitative results. This survey was carried out in the selected municipalities (9 municipalities

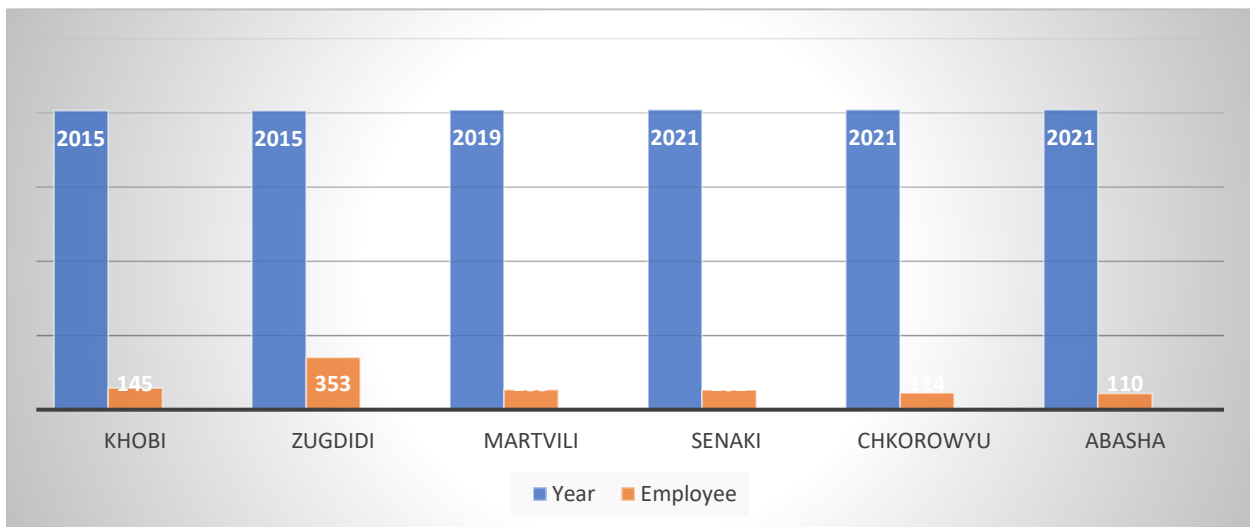
which are the subjects of this study). Totally in the survey were 10 questions. The detailed breakdown of the results will be displayed in the sub-chapter 5.2. The list of the questions is provided in the appendix N2.

### 5.1 Analysis of interviews

In this subsection, the author offers an analysis of the existing reality as well as the results obtained by combining the results obtained from the interviews.

During the interviews, it was revealed that the municipalities have started to introduce electronic services at different times (these figures below were developed by the author based on the results of qualitative research).

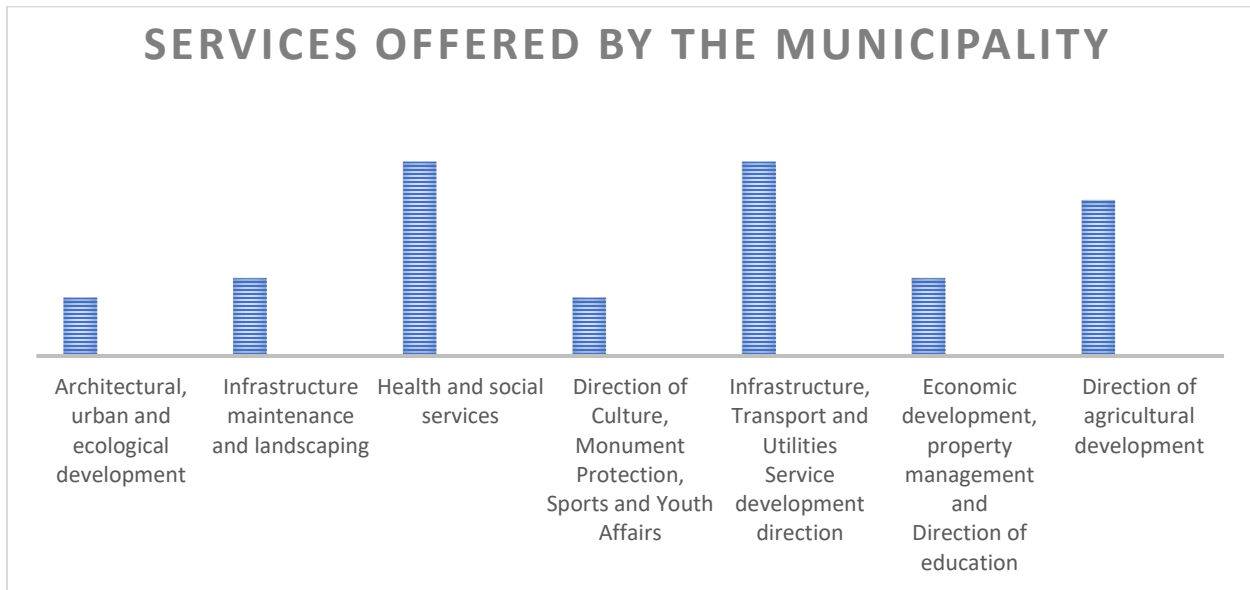
Figure 7 – Introducing e-services and employees by years



As the figure N7 shows, almost all employees in all municipalities use e-services, and a maximum of 5 people per municipality are directly focused on the e-service delivery. Since the introduction of e-services, none of the municipalities has employed a developer who is directly involved in creating them, and no training has been conducted. Advanced training is also quite problematic in the region, and staff rarely participate in such activities.

Interviews revealed that all municipalities offer all services provided to the population within the scope of self-government. According to the Local Self-Government Code, the types of powers of the municipality are 1) own powers of the municipality; 2) Delegated powers of the municipality. Figure N8 shows all services offered by the local self-governments.

Figure 8 – services offered by the municipalities



The most requested services can be divided into two directions. The first is the most in-demand for citizens with individual needs: social and health care assistance services. The second- mass, daily need direction for the municipality's population can be cleaning, municipal transport, and amenity services.

Respondents point out that: services are mainly focused on vulnerable groups, including the elderly, although the Local Self-Government Code does not define their responsibilities as social assistance and health care. Still, the municipality is committed to voluntary powers and mainly focuses on citizens, which respondents associate with the current challenging economic background.

The services are designed considering both the needs of the elderly and the needs of people with disabilities. Respondent Nana Zarandia, Senaki Municipality Administrative Service head - identifies "*persons with disabilities because they need special services and infrastructure that we provide today in Senaki Municipality and are adapted for such persons and are equipped with ramps. The City Hall was fitted with similar infrastructure so that they could come along and submit their application, request, or complaint. We also have a care center for the disadvantaged - it provides free food to specific beneficiaries.* **Home Care Program:** *In this regard, Senaki Municipality is the first to introduce and pilot it one year ago. With the involvement of non-governmental organizations, and from 2022 fully funded by the municipality. We have an implementing organization, and the whole municipality is financing it. The program involves - the*

*elderly who are home alone. We provide them with certain services, coming home, care, cleaning, yard cleaning, catering, etc. We also have a care center for the disadvantaged - it provides free food to specific beneficiaries."*

The interview revealed that citizens are involved in the municipality's activities. However, the percentage is relatively low, even though representatives of the relevant structure of the municipality are actively trying to increase their participation. If you look at the trend, it is rising, but the involvement is still low. The interview revealed that the municipality's activities mainly involve the same contingent who are interested and familiar with the structure of the municipality, have a good understanding of the essence of the municipality and know how to use municipal resources in a good sense. The main contingent is NGOs and civil activists.

As the interview shows, the level of citizen involvement in the activities planned by the municipality is not satisfactory. However, certain groups of people are interested in municipal issues and get involved in various ways. Examples: attending local assembly meetings, attending commission meetings, participating in the Mayor's Advisory Board, and attending hearing reports. Zugdidi Municipality also uses informal mechanisms such as civil budgeting, the same participatory budgeting, and the green budget. There are also co-operative, which include a co-financing component. These partnerships present a variety of projects in need, and the municipality provides them with a reasonably high 95% co-financing.

The forms of citizen participation in the implementation of local self-government are:

- The general assembly of the settlement;
- Participate in sessions of the Municipality assembly and the Municipality local assembly commission;
- The Council of Civil Advisers
- Petition;
- Hearing reports on the work done by the mayor and a member of the municipal council.

Municipalities offer the following types of electronic services to the population.

- Petitions, however, are not fully electronic as the signature function is not added and citizens must scan and send it that way.
- Public information can be requested online.

- Can communicate via email.

According to the respondents, the Municipal Services Agency of Tbilisi City Hall program is available on the municipality's websites, the distribution of which started in 2016 and is currently available in all municipalities. The program includes:

- A social service delivery module.
- An infrastructure module.
- The issuance of construction permits.
- The commissioning of buildings.

There is also a built-in program Idea to the Mayor when a citizen can propose an idea to the mayor, and it is discussed in the City Hall, and an appropriate decision can be made. There is also an asset management module that is not yet operational but will be activated, property management building registration, etc.

According to Giorgi Chikovani, *“since the pandemic started, the municipalities were holding the meetings of the City Council in the zoom, and a link was posted on the social media “Facebook” where any citizen could attend the meeting, ask questions, and participate in the form of comments. Facebook Live is also enabled after the regulations are lifted. Still, Zugdidi Municipality does not have cameras and necessary equipment, so one representative gets on the phone and can also participate and write a comment.*

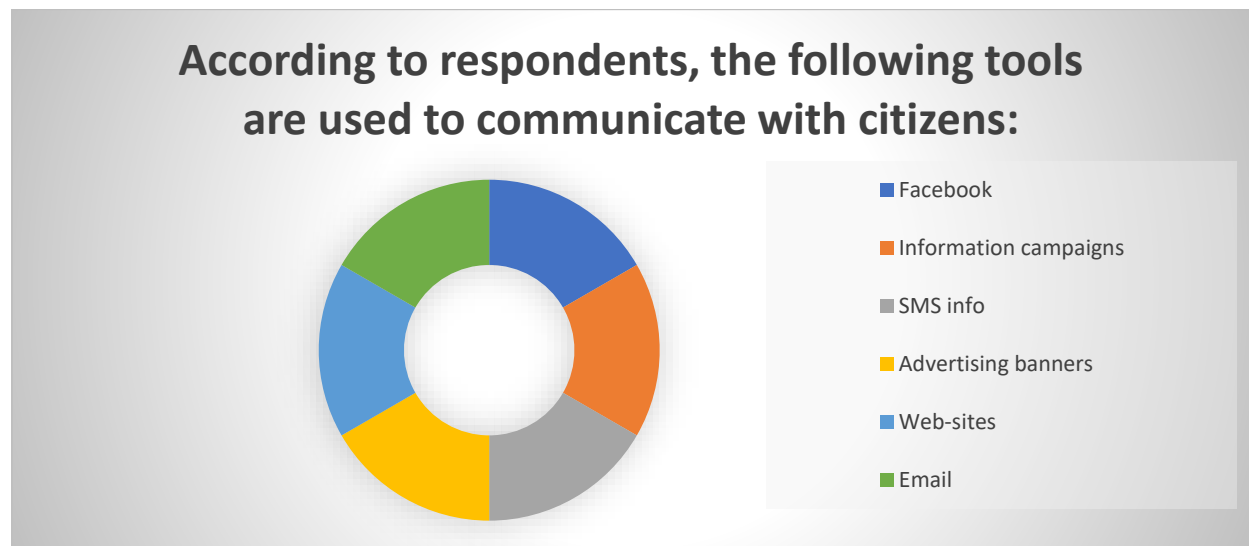
Currently, Khobi Municipality has the best infrastructure for upgrading and equipping e-service delivery. According to Zviad Bukia, *“today's villages have a chancellery. Citizens do not need to go to the city to file a complaint or proposal but can do it on-site and receive a response immediately”.* According to Tamar Tsivtsivadze, *“it is planned to expand the Internet in Martvili municipality because they do not have it in the villages. The computer equipment is updated every year”.* The rest of the other municipalities are primarily in need of upgrades, and if they find the money, they will necessarily upgrade.

As for the e-services delivery rate, representatives of all municipalities believe that many are satisfactory and can be improved. However, Zugdidi representatives believe that the services offered are poor, and both equipment and services need to be improved.

The interview revealed that citizens rarely use e-services, and no satisfaction survey was conducted in any municipalities. However, respondents believe that the population has a positive attitude

towards e-services. Among the tools for citizens to engage in self-government, registering their documents with their municipality is the most efficient. Respondents said, most people go to the place to get the desired service, although they use e-mail and social media for communication. Figure N9 shows the tools used by the local municipality to communicate with the population.

Figure 9 – Tools used to communicate with the population



It is also worth mentioning the readiness of the representatives of all municipalities to introduce e-services, where they believe that the new generation, internetization and modern technologies will allow them to be more actively involved in self-government activities. In their opinion, the more e-services are introduced, the more the population will be involved. It is essential for the municipality and the population and the development of self-government activities in general.

Another interesting finding was that all the municipalities had the same response because they have no opportunity to create their e-services or programs. Nevertheless, they may prepare proposals to request additional services if needed. Afterwards, a study will be conducted, and the Municipal Services Development Agency will provide those services, although there are no precedents.

Besides financial resources, knowledge and competence are also lacking to create a new service. All municipalities have a problem, and the author will single out Zugdidi Municipality, where Giorgi Chikovani talks about the existing challenges and issues. *"In 2018, the application Igov.Zugdidi was created, which contained tourist locations, dates of City Council meetings, dates of commission meetings, short biographies of officials, and information on various planned*

activities. We tried to announce a tender, and it was announced incorrectly, and now, unfortunately, it does not work. "Also problematic is our site where 20% of the information disappears, and the same problems still exist".

## 5.2 Quantitative research analyses of the survey results

The figure below shows how accessible the Internet is to the study population and how often they use the Internet. Quantitative data from the survey revealed that 89.3% of the respondents living in municipalities have access to the Internet 24/7, limited access has 6.3%, and the remaining 4.4% have access to community centers. According to the respondents, 63% use the Internet every day, 23% use the Internet quite frequently, 20% use the Internet with "average" intensity, 15% - rarely, and 5% do not use the Internet (these figures below were developed by the author based on the results of quantitative research). Figure N10 shows the frequency of Internet by the population.

Figure 10 – Frequency of Internet use

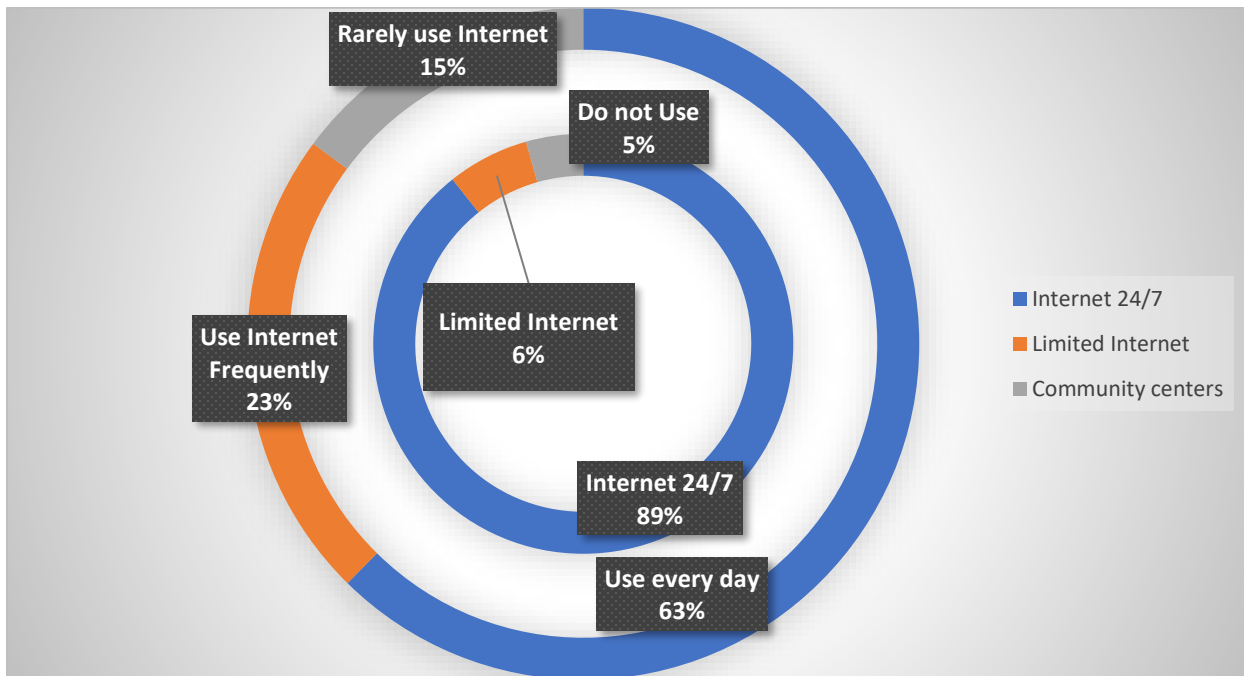
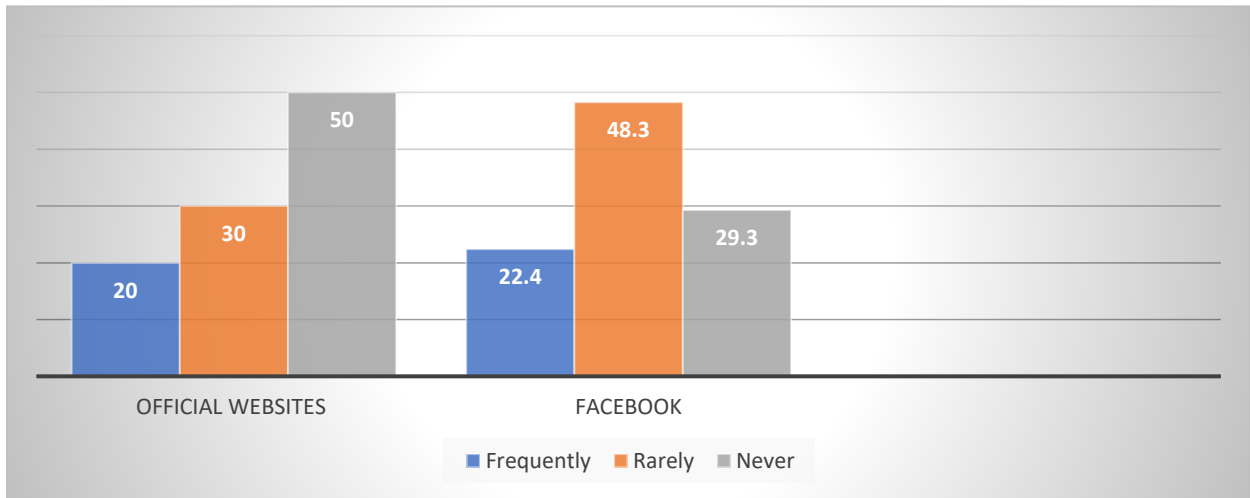


Figure N11 answers on the question of how often they use a local municipality website, only 20% surveyed said frequently, 30% seldom, and 50% never. In response to the question of how often they communicate with the municipality through social media, 48.3% said they rarely communicate, 29.3% never had a similar relationship with the local municipalities, and 22.4% have a frequent connection with the local municipalities.

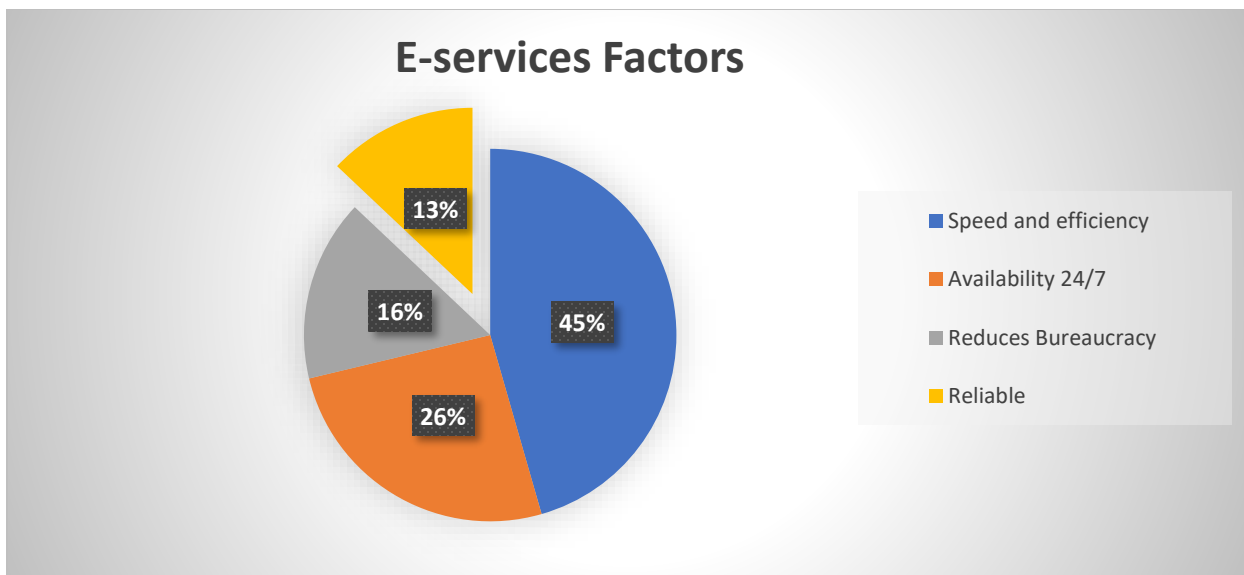
Figure 11 - Frequency of using local municipality website and Facebook pages



Regarding the knowledge about e-services offered by the municipality, the respondents stated the following: 32.5% think that it is aware, and 47.8% think that they have limited information. In comparison, 19.7% do not have any information at all. The survey revealed that 32.2% of respondents used e-services offered by municipalities in the last month, 14.6% six months ago, 11.7% a year ago, and 41.5% did not use them.

The survey found that when asked how much it saves time using e-services, 88.2% of respondents believe that it saves time, 10.8% - are not convinced of the validity of this opinion, while 5% do not think that it saves time at all. Figure N12 illustrates to what factors influence the use of e-services is:

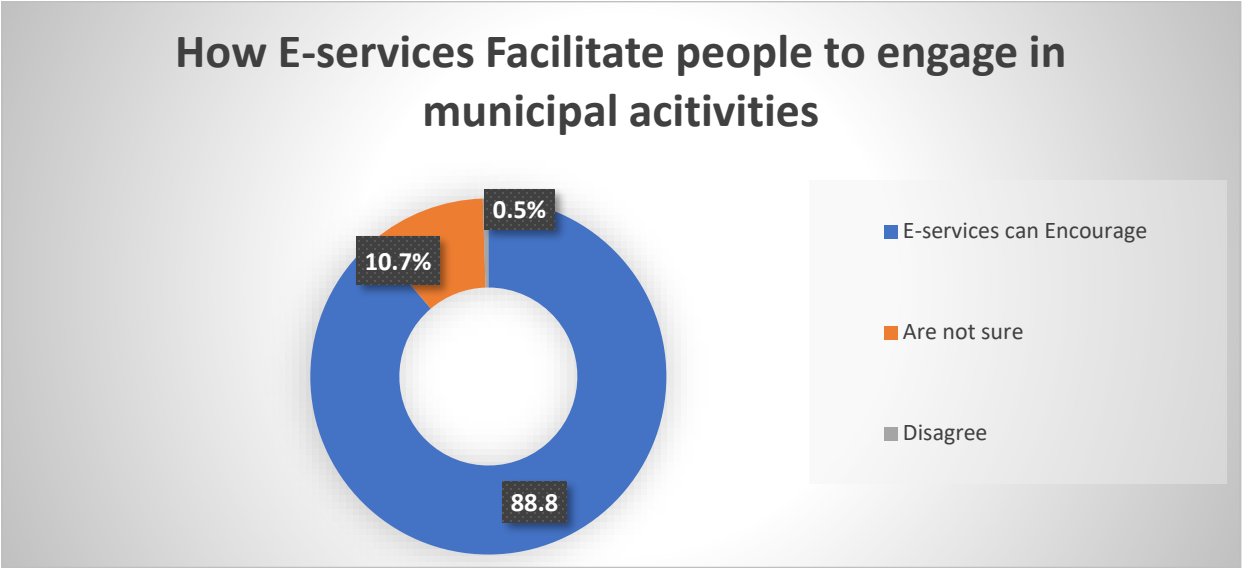
Figure 12 – e-service factors





The survey revealed that when asked if they are satisfied with the e-services offered by the municipality - 29.8% of respondents said they are satisfied. 30.7% have no specific opinion on this, while 39.5% are dissatisfied. Nevertheless, when asked how they think e-services can motivate people to get involved in local government activities, respondents answered as follows in the figure N13.

Figure 13 – How e-services facilitate people to engages in municipal activities



## 6. Discussion and Analyzes

In order to structure the content of the thesis logically, dynamically, and constructively, the author discussed local self-government and proposed theories related to local self-government. Explained decentralization and its relationship to local self-government and finally discussed definitions and trends associated with e-government.

Since the topic is the population's involvement in local self-government through e-government, the author used data from both local and international surveys to measure the situation. Within the framework of OGP commitments, Georgia is actively developing e-services in the country, and all four commitments have been analyzed.

To determine the country's rating and level of general e-government, the Author used the UN survey, which includes all member states and analyzes e-government trends, allowing us to determine the general picture uniquely. To answer the research questions, a quantitative survey

was conducted through a questionnaire and a qualitative survey using interviews, and we obtained the current situation as reflected in the previous chapter.

In this chapter, the author reviews and combines each chapter and subsection to show the connection between them uniquely and give clear answers to the research questions.

The first RQ was – „what are local governments' institutional capacity and readiness levels to launch and operate e-services“.

As evidenced by the UN data used in this thesis, states are trying to improve their governance processes by using modern technologies, as well as the increase the e-services over the last few years by different countries. The respondents' responses as a result of the interviews are also crucial in this regard, as every single one of them unequivocally confirmed that they are ready to implement and use e-services.

It should be noted that the integration of e-services in the management process is often associated with high costs, as confirmed by the representatives of all municipalities in the qualitative research. Due to the challenging economic situation, they do not have sufficient financial resources to implement e-services independently. In addition to financial resources, there is also a lack of knowledge and competence to create a new service. None of the municipalities employs competent people responsible for developing e-services or eliminating gaps related to a relatively simple website. They do not have the means to purchase and upgrade even the necessary infrastructure and periodically purchase it, which takes time. An excellent example of this was the interview conducted in Zugdidi Municipality, where the respondent Giorgi Chikovani talked about the problems mentioned above.

The above two points directly answer the first question of the research: the research revealed low institutional capacity of local self-governments, lack of financial resources and low level of knowledge and competence. However, it is important for this stage that both research has shown a positive attitude in terms of both the introduction and use of e-services.

In the interviews, all respondents unequivocally stated that despite the lack of financial resources and competencies, the existing services were introduced by the Ministries of Infrastructure, Justice and Finance. Currently, the Municipal Services Development Agency has started offering e-services to municipalities, although research has shown that existing e-services are not enough.

Consequently, it is the delegated form of administrative decentralization, which involves the transfer of some decision-making powers, resources, and responsibilities from central public services to lower levels of government. It can also be described as deconcentration, a controlled form of decentralization. It is mainly used in unitary governments. State institutions (ministries and other agencies) set up their own bodies in various fields (for example, regional representatives of the Ministries of Interior, Education and Justice).

It can be evaluated as a helpful and beneficial when the central government assists local self-governments with financial resources, human knowledge, and competence. However, the feature of local self-government as an institution is to be independent and autonomous, and such an approach hinders the development and motivation of employees in local municipalities. Because whenever they face a financial deficit or any challenge, they always turn to the central government for assistance, which reduces their autonomy and makes them more dependent on the central government.

In addition, the central government has no financial resources, and they are increasing their foreign debt every year. At the same time, governments are mainly concerned with macroeconomic issues and global projects and cannot raise enough funds for local needs. In this regard, fiscal decentralization is necessary to increase their autonomy and motivation. Hence, they will become more accountable to the population.

Fiscal decentralization redistributes local resources, and local governments can function effectively and finance the responsibility for providing assigned services. Fiscal decentralization policies address the imposition of local taxes and revenue distribution via local taxation and consumer and market fees. To work successfully, it must increase revenue autonomy, build capacity for data analysis for budget decisions, and establish proper trustee controls.

After this process, it is necessary to move to political decentralization, which transfers political power and decision-making power to the sub-national level. Such a process is known as a - Devolution, and it occurs when power is fully transferred to lower levels and is carried out using local resources. As a result, the implementer (local self-government) is accountable for the outcomes not to the central government at the highest level but to the law and the people.

Accordingly, each municipality will set priorities and plan a budget based on its needs. If they believe e-services are essential for boosting communication and increasing citizen participation,

in that case, the process of implementation will become easier. Studies have shown that readiness is excellent in using e-services, although there are many problems facing them both in terms of infrastructure and knowledge and competencies.

The second RQ concerns the involvement and participation of citizens in the activities of selected self-governments. The interviews revealed that citizen involvement in the activities planned by the municipality is not satisfactory. The survey also measured the use of e-services by the population, where we also got an unsatisfactory picture. 80% of the population is less interested in getting acquainted with the planned news through the municipality's website. Only 22% communicate with municipalities through social networking, although this can be explained by the fact that it was the only means of communication during the pandemic. Almost 70% of the survey participants are not informed about the services provided by the municipality, and only 30% use them. In the survey, almost 70% of the population expressed their dissatisfaction with the e-services offered by the municipalities.

Therefore, it can be said that most of the introduced digital services do not live up to expectations, and this is due to several factors, including the lack of scientific research on this issue. The introduction of e-government in many countries is underway without any prior research. The government has no information on what type of digital services are ordered by the public or whether there is a demand for e-services. In this regard, interviews revealed that none of the municipalities surveyed the level of public satisfaction with e-services and nor received feedback. Despite the current development of e-government, there are still many challenges facing the Georgian government sector. It should be noted that the introduction of e-government in Georgia is inconsistent. Consequently, the introduction of e-government is flawed. Such factors as training of public servants, introduction, and expansion of e-services in the regions, the level of ICT infrastructure in the country, the cyber security potential of the state, etc., are not considered.

The main problems come in the regions where the municipalities' websites are periodically turned off, and the information is not updated promptly. The e-services offered by the municipalities are mainly only for requesting public information and the use of e-mail, which is very scarce. In the capital, population involvement and dependence on e-services are relatively higher, although even then, the overall picture is unsatisfactory. An excellent example of this is the official website of

the City Hall, where it is possible to participate in budget planning online. However, a total of 192 people participated in it (Tbilisi City Hall, 2022).

The last question of the research was how e-services could influence the involvement and participation of citizens in the activities of selected self-governments, which revealed exciting results during interviews and research. Respondents expressed their readiness to introduce e-services during the interviews. According to the Senaki Municipality Administrative Service head, *"the more e-services are introduced, the more the population will be involved and important for the municipality, the population and the self-government in general."*

According to the survey, the population named the most important factors when using e-services - fast and efficient, available 24/7. 88% of the survey participants believe that e-services save much time, and almost 90% expressed their readiness that e-services can increase the involvement of the population in the municipality's activities.

## **6.1 Limitations of Interviews and Questionnaire**

Studies were conducted using quantitative and qualitative methods to answer the research questions, and the limitations are in both studies.

In the case of qualitative research, several factors influence research limitations. As mentioned in the previous chapter, representatives of six municipalities participated in the interviews, where there were nine municipalities in total. Unfortunately, it was impossible to conduct interviews with other municipalities for various reasons (one of them was internet access in Tsalenjikha municipality). The most challenging in this regard was conducting online interviews in an online format.

A limitation is a quantitative method, and the study surveyed 205 residents. The first problem can be named conducting online surveys remotely because most of the participants in the study might have been employed. In the survey participated, 205 people, with results obtained due to sampling design and lack of volume to identify trends. Due to the distance, it was not easy to accost and interview all stakeholders to investigate their viewpoints.

These findings were all gathered through their parallel analysis. However, if the same study is conducted again in the future, the validity of the study will probably be undermined. This will be

because the internal and external factors will have significant influence and might alter the results and not be possible to imitate.

## 7. Conclusion

The main course of research given in this thesis aims to identify factors that are interrelated and greatly determine successful implementation of local self-government as a concept. The following conclusions can be drawn in this regard:

- In terms of creating guarantees for the functioning of local self-government, special attention is paid to a proper understanding of the essence of local self-government. It should be noted its democratic purpose and value, which means that through this institution, the share of citizens in the system of public political management is significantly increased.
- The second purpose of local self-government lies in the function of balancing public authority, which means the effective implementation of the system of public authority in general, which is achieved through the decentralization of powers and the use of constitutional mechanisms. Decentralization of powers and proper redistribution of functions are the basis of effective management.

The research shows that despite the current development in the practice of public institutions in terms of e-government and the introduction of e-services, there are still many challenges facing the Georgian government sector.

In the modern world, any state is trying to improve the governance process using modern technologies. However, it should be noted that despite the integration into the e-services governance process, most of the digital services introduced do not live up to expectations. This is due to several factors, including the lack of scientific research on this issue. The introduction of e-government in many countries is underway without any prior research. The government does not have information on what type of digital services are ordered by the public or whether there is a demand for e-services at all.

Information can be obtained via the Internet, but standards for electronic communication with the public need to be refined. In order to facilitate the participation of citizens in obtaining information

and discussing various issues, it is necessary to develop websites and timely updates, which include access to various services on the web resources of government and public institutions.

It should be noted that the introduction of e-government in Georgia is inconsistent. A survey at the local government level revealed that e-government and e-services were introduced at different times.

Research has identified several shortcomings to eliminate in the following directions:

- The country's ICT infrastructure (including spreading the Internet and providing with necessary equipment)
- Training of public officials and hiring competent staff
- conducting a public satisfaction survey

Services such as point of connection need to be digitized to digitize the country and increase citizen engagement. Platforms for communications should be created where it is possible to integrate payments and other services.

The research revealed that the most demanded services in social, health, transport and agricultural areas should be digitized. Sensors should be developed to facilitate real-time tracking of transport. Grant applications or other types of applications should be available electronically.

As a result, such policies will improve services and better the exchange of information. It will increase governments' transparency and increase trust towards the population, save costs, improve the quality of business life and activity for citizens, increase citizens' interest in and use of services, and increase their involvement in municipal activities.

## 7.1 Future Work

Although the author attempted to be thorough in his research, following the case study approach, used data triangulation and the outcomes were achieved through data analysis, there is more that can be explored. As author already mentioned, it was not possible to study all the 9 municipalities of the Samegrelo Upper- Svaneti region (access was obtained to 6 of them) and the number of the survey respondents was 205. The current study thus provides a background for another research that can be done in other region, with a larger scale and increased stakeholder involvement. Furthermore, this study can be a starting point for the researchers aiming to conduct similar studies in other countries where e-Government solutions are recently being implemented.

As this study argued international cooperation had facilitated the introduction of e-services in the country, and therefore, it is important the impact of such cooperation over the country to be further investigated. The same applies to developing a theoretical basis for cross-sectoral cooperation among central and local governments and international organizations. This type of collaboration is essential for sustainable development, and has been under the UN research in recent years. Although this study aimed to address this issue, a deeper, more methodological and larger-scale approach is needed to exhaustively tackle this matter.



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## Appendix N2 - Interview Questions

Questions for the Local self-government is divided in two parts:

### **General services and description:**

1. How many employees are there overall in the municipality?
2. What are the general services offered by the local self-government / your municipality
3. What are the primary services offered by your municipality?
4. What are the most demanded services offered by your municipality?
5. How are the links with citizens maintained?
6. What are the means of communication with the citizens? How can they reach to the municipality for delivering their need, concern, suggestion?
7. From your perspective, how satisfactory are the services offered by the municipality?
8. From your perspective, are citizens engaged in the activities planned and implemented by the municipalities?  
If yes – what are the forms of their engagement?  
In no – what are the reasons behind?

### **E-services description**

9. When did your municipality launch the e-services?
10. How many of the municipal employees are focused on the provision on e-services?
11. Do your employees attend qualification increase trainings on provision of e-services?  
If yes – how often? Who provides these trainings?
12. Does the municipality update its e-service provision infrastructure?  
If yes – what type of updates?
13. How satisfied you are with the delivery of e-services?
  - Extremely Dissatisfied
  - We provide Poor Services and there is much to improve
  - Neutral
  - We have Satisfactory e-services overall, but needs some improvements
  - Extremely satisfactory – smooth and close to perfect
14. Are the provided e-services used by citizens?
15. How often do the citizens use e-services?

- Not at all
  - Very seldom
  - Sometimes
  - Quite often
  - Very often
16. Do you evaluate the satisfaction level of citizens usage of e-services? Do you have online surveys or questionnaires? Do you receive feedback?
17. In your opinion, what do the citizens think of the suggested e-services?
- They find it totally useless
  - They find is somehow useless
  - They do not have concerns or support towards eservices
  - They use it quite often and think e-services are useful
  - They totally depend on e-services and find them extremely useful
18. In your observation, which of the e-services are most frequently used by citizens?
19. In your opinion, can existing e-services increase the participation of citizens in municipal activities? If yes – how? if no – why?
20. How do you evaluate the level of autonomy?

## Appendix N3 – Survey Questions

1. How accessible is the Internet to you?
2. How often do you use the Internet?
3. How often do you visit your local municipality's website?
4. How often do you communicate with your municipality through social media (Facebook)
5. How well informed are you about the e-services provided by your municipality?
6. When was the last time you used the e-service offered by your municipalities?
7. What factors influence you to use e-services?
8. How much time does the use of electronic services save?
9. Are you satisfied with the use of municipal e-services?
10. Do you think e-services can encourage your involvement in the activities of the local municipality?