

RESEARCH
ARTICLE**Digital Local Government: A Mechanism for Embracing Good Governance. Estonia as a Model****Souigat Abderrazak**

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Digital Transformation, E-Government, Digitization of Local Administration, Electronic Government.

Abstract

The study concluded that digitisation is a key element in promoting good governance at the local government level. Estonia's experience has demonstrated the role of digital transformation in improving the efficiency of public services, increasing transparency and promoting community participation. By adopting advanced technologies such as integrated electronic platforms and digital identity systems, Estonia has succeeded in overcoming traditional bureaucratic challenges and strengthening accountability. The results also show that the implementation of digital local government contributes to building citizens' trust in public institutions and reducing the gaps between the authorities and civil society, reflecting a practical integration between technological innovation and the requirements of good governance.

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Introduction

Local government is one of the main pillars for achieving sustainable development and promoting good governance in modern societies. But traditional models of local government often face a bunch of challenges, like complicated bureaucratic procedures, not enough transparency, and limited effective community participation. In light of these challenges, the shift towards digitalisation has become an urgent necessity to enhance the effectiveness of local government and achieve good governance objectives by improving the quality of services, facilitating access to them, and enabling citizens to participate effectively in decision-making processes.

Estonia is a global leader in digital transformation, having successfully built an integrated model of digital administration that serves as a role model. Estonia was chosen as a case study in this article due to its unique experience, which began in the mid-1990s and has enabled it to make remarkable progress in providing digital public services,

applying the principles of transparency and accountability, and strengthening trust between the government and citizens. This model shows how the use of technology can radically transform the working methods of local government and contribute to the embodiment of the principles of good governance.

This study aims to analyse the topic of digital local government as a mechanism for achieving good governance, focusing on the Estonian experience as a model to be learned from. It asks the following key question: How does digital local government contribute to the embodiment of good governance in Estonia? To achieve this goal, the study will address three main interrelated themes:

First: The conceptual framework of the study: This theme presents the concept of digital local government and the concepts of good governance. Second: Estonia's digital transformation strategy: This theme reviews the most important stages and steps taken by Estonia to de-

velop a digital local government system, focusing on the policies and programmes that contributed to its success. Third: The role of digital local government in embodying good governance in Estonia: This section discusses the impact of digital administration on improving service quality, achieving transparency and accountability, and enhancing community participation, thereby contributing to the promotion of good governance.

Through the analysis of these sections, the article seeks to provide a comprehensive overview of how other countries can benefit from Estonia's experience in activating digital local administration as a tool for embodying good governance. This study is not limited to praising Estonia's successes, but also aims to draw lessons learned and provide practical recommendations for countries wishing to adopt similar strategies to achieve sustainable development and good governance.

First: Conceptual framework of the study

1. The concept of local government digitisation

1.1 Definition of local government digitisation

We will attempt to present the definitions provided by the United Nations and the Organisation for Economic Co-operation and Development, as well as the definition provided by researcher Richard Hicks.

1.1.1 United Nations definition

"Local government digitisation refers to the use of information and communication technologies (ICT) to improve public service delivery, enhance transparency, and increase citizen participation in local decision-making" (United Nations E-Government Survey, 2022, pp. 45-50).

1.1.2. Definition of the Organisation for Economic Co-operation and Development (OECD)

"The process of transforming local government through the adoption of digital technology, with the aim of improving operational efficiency and delivering innovative services that better meet the needs of citizens" (OECD, 2019, p. 23).

1.1.3. Academic definition from Richard Hicks' study

"The digitisation of local government means integrating digital technology into the administrative processes and services of local levels of government, contributing to operational efficiency, increased transparency and enhanced interaction with citizens" (Heeks, 2006, p. 75).

1.2 The importance of digital local government

Enhancing transparency and accountability: Through the use of tools such as open data platforms, citizens can access and monitor information related to local government performance.

Improving service delivery: Digital transformation enables faster and more accurate service delivery, such as

renewing licences, paying taxes, or applying for water and electricity services.

Citizen engagement: Providing direct communication channels through apps or digital platforms enables citizens to easily express their needs and complaints.

Administrative efficiency: Digital tools can improve decision-making by providing accurate data and advanced analytics that help guide local policies.

Environmental sustainability: Reducing reliance on paper and traditional resources contributes to promoting environmentally friendly practices.

2-The concept of good governance:

2.1. Definition of good governance: Good governance is an approach to managing public and private institutions that aims to achieve sustainable development by ensuring efficiency, fairness, and justice. Also known as "good governance," it is a comprehensive concept that expresses the exercise of power to manage the affairs of the state or institution in a manner characterised by integrity and credibility. Good governance focuses on achieving a balance between the various stakeholders (the state, civil society, the private sector) to promote development and achieve common goals. (UNDP governance for Sustainable human development.1997.pp.41.46)

2.2. Key dimensions of good governance:

Transparency: This refers to the clarity of processes, procedures and decision-making, allowing citizens and beneficiaries of public services to understand how resources are managed and decisions are made. Transparency is manifested through: the regular publication of financial and administrative information; ensuring access to information; and applying the principles of freedom of the media and the press.

Accountability: This refers to the responsibility of individuals and institutions for their actions before the competent authorities and society. Accountability includes two main types: Horizontal accountability: This occurs between different government agencies. Vertical accountability: This occurs between public authorities and citizens.

Participation: The essence of good governance lies in involving citizens in decision-making and planning. Participation takes various forms: civil society participation, referendums, and public consultation. Participation ensures that all voices, including those of marginalised groups, are heard in the formulation and implementation of policies. (UNDP. Reconceptualising Governance. 1997.pp.41.46)

Rule of law: This means applying laws fairly to everyone without exception, ensuring justice and equality. The rule of law depends on: An independent judicial system. Strengthening the principle of separation of powers. Imposing penalties on violators in a fair and transparent manner.

3. The relationship between the application of digital local government and the achievement of good governance principles

The use of information and communication technology in local administration enhances efficiency, transparency and accountability, leading to improved administrative processes and increased citizen confidence in government institutions. Let us review this impact in three main areas: (UNDP. Reconceptualising Governance. 1997.pp.41.46)

Improving transparency:

Digital administration makes government data available to everyone in quick and easy ways, which limits illegal practices and boosts public trust.

Mechanisms for promoting transparency:

- Geographic information systems (GIS): Displaying information about urban planning and infrastructure on interactive maps that are available to the public.
- E-portals: Publishing municipal budgets, local development plans, and approved and allocated projects for each region.
- Open data: Providing statistical information and performance reports of local administrations on a regular basis.

Enhancing accountability:

Digital administration creates a traceable electronic record of every decision or transaction, facilitating performance monitoring and accountability.

Mechanisms for enhancing accountability:

Monitoring and evaluation systems: Use key performance indicators (KPIs) to measure achievements against targets.

- Corruption reporting: Electronic applications that allow citizens to report corrupt practices confidentially.
- Electronic review systems: Tracking signatures and approvals on documents to ensure transparency in decision-making.

Improving service delivery efficiency:

Digital management reduces the cost and time required to deliver services, while ensuring greater quality and reliability.

- Automation of public services: Reducing human intervention in routine administrative processes.
- Services via applications: Enabling citizens to submit applications and pay fees electronically.
- Smart resource management: Use artificial intelligence to analyse data and make effective decisions. (The world Bank.1991.p01)

Second: Estonia's digital transformation strategy

Estonia is one of the leading countries in the field of digital transformation and has established an advanced model in this field at the level of digital governments. Estonia's digital transformation strategy focuses on using technology to simplify government processes, improve public services, and promote transparency and community participation. In this analysis, we will examine Estonia's digital transformation strategy through several key themes.

1- The primary goal: digitising government and simplifying public services

Estonia has adopted a comprehensive strategy to transform its government into a fully digital government. This journey began in the late 1990s with the establishment of basic digital infrastructure. These efforts were reflected in the provision of government services online, with almost all government services becoming available to citizens digitally. Through this strategy, citizens can access most government services, from issuing documents and paying taxes to voting in elections, online, greatly reducing the need for direct interaction with government agencies.

The main objective of this strategy is to reduce bureaucracy and simplify government procedures, leading to more efficient and transparent services. Estonia provides citizens with an electronic platform through which they can access all their government records, including the population register, vehicle register, and tax records. These digital services serve not only local citizens, but also foreign communities residing in the country, facilitating their integration into the government system. (Rainer Kattel and Ines2019.p150)

2- Developing digital identity (e-ID) as part of the digital transformation

One of the most prominent pillars of digital transformation in Estonia is the adoption of digital identity (e-ID), which is a pivotal tool that allows citizens to interact with the government securely and efficiently. Digital identity is a unique digital card that represents the identity of each citizen and allows them to access government services online, including signing documents electronically. This system allows citizens to access a wide range of government services easily and securely, including electronic voting, business registration, and reporting changes in address or marital status. .(Rainer Kattel and Ines2019.p150)

Through this system, citizens can be sure that their personal data is securely protected, which enhances their trust in the digital system and reduces privacy concerns. The system is also flexible and scalable, as it can be developed to accommodate more government services and functions in the future.

3- Digital interaction and community participation

Estonia has not only digitised government services, but has also adopted the concepts of "open government"

and "e-participation". Through these initiatives, citizens can interact with the government and participate in decision-making processes. Citizens can participate in digital opinion polls, legislative proposals, and even vote on important political issues, such as national elections or local referendums.

Estonia's digital system ensures that all government decisions are clear and transparent to citizens. All government actions are also recorded digitally, allowing them to be reviewed by everyone and contributing to increased transparency and accountability. (Rainer, k., & Ines, M. (2019) .p151)

4-Integration between different sectors

Estonia's digital transformation strategy includes integration between different government and private sectors. By providing unified digital platforms, citizens can easily access government information without having to navigate between different ministries and government institutions. This integration between sectors contributes to improving efficiency and reduces the effort and time that was previously required to obtain the desired service.

For example, in Estonia, citizens can manage all their government affairs related to social insurance, health, taxes, and education through a single digital platform. This integration enhances cooperation between the government and citizens and ensures better and more accurate services.

Third: The role of digital local government in embodying good governance in Estonia

1. Local online services in Estonia

Estonia is one of the leading countries in the implementation of local online services and is among those that have successfully used technology to improve the delivery of public services to citizens. The digital transformation has contributed to enhancing access to these services, making it easier for citizens to obtain them quickly and efficiently, while promoting transparency and community participation. This analysis focuses on the local services provided online in Estonia and how this has contributed to improving the relationship between citizens and local government.

1.1. Digital identity (e-ID) as a key tool for local services

Digital identity (e-ID) is the basis for the provision of most local services online in Estonia. This identity allows citizens to access a variety of government services through a unified and secure platform. Using e-ID, citizens can interact with many local services such as paying taxes, applying for licences or permits, and registering for health or education services, all without having to visit government offices. These digital services provide instant and secure access, saving time and contributing to greater efficiency. .(Rainer Kattel and Ines2019.p152)

This digital ID is one of Estonia's most important achievements, as it makes it easy for citizens to carry out

their daily transactions flexibly and quickly, thereby reducing the need for cumbersome paperwork. Digital ID is a central component of Estonia's digital local services ecosystem, enhancing accessibility and reliability.

2.1. Accessibility of local services online

Local government services in Estonia are among the most advanced digital services in the world. The government offers a wide range of online services, including, for example, submitting complaints or general requests, obtaining building permits, and reporting infrastructure problems such as potholes or damage to streets. These online services are easily accessible, allowing citizens to conduct transactions at any time and from anywhere using the internet, making services more convenient compared to traditional procedures that require visits to government offices.

The Estonian state provides citizens with access to their personal records online, such as health, education and financial records. This allows them to monitor their legal or financial status without having to physically visit local offices. The Estonian government also provides digital platforms for participation in public affairs, such as surveys or community discussions on local issues. (Stephane remy.antoin barde.2024. p11)

Despite the significant progress Estonia has made in providing local services online, there are some challenges that need to be addressed. One of the most notable challenges is the digital divide among citizens, as there are still some people, especially the elderly, who find it difficult to adapt to modern technology. There is also a need to continuously secure digital platforms to ensure that personal data is protected from cyber attacks.

Estonia is a global model for using digital transformation to improve local services and citizen interaction with the government. Through digital identity and online government services, the country has been able to provide more efficient and transparent services. However, overcoming challenges related to the digital divide and maintaining data security remain critical to ensuring the sustainability of these digital models and maximising their benefits. (Stephane remy.antoin barde.2024. p11)

2. The role of local government digitisation in promoting transparency and accountability in Estonia

Estonia is one of the leading countries that has demonstrated how to achieve digital transformation in local government, with digital government services becoming an integral part of citizens' daily lives. This transformation has not only improved access to local services, but has also contributed significantly to enhancing transparency and accountability at various levels of local government. In this analysis, we will examine how Estonia has used digital technology to improve transparency and accountability in local government.

1.2. Transparency through open data platforms

As part of the digitisation of local government, Estonia has developed electronic platforms that give citizens easy access to government data and information related to local government. Among the most notable of these platforms are open data portals that provide access to details of public budgets, local projects, and the distribution of government funds. This transparency empowers citizens to monitor how public resources are allocated, facilitating the evaluation and review of local projects and initiatives.

These platforms also allow citizens to report issues or provide feedback on government actions, opening the door to direct interaction between local government and citizens. This type of transparency is not limited to providing information, but also enhances social control over the performance of local government and reduces opportunities for corruption.

2.2. Digital identity (e-ID) as a tool for accountability

Digital identity (e-ID) is one of the key tools that enables citizens to participate in digital government services in Estonia. Through this identity, citizens can access their personal records and participate in government services such as e-voting, filing complaints, or submitting applications. Through this system, all government actions taken by citizens can be tracked, which enhances accountability.

For example, if a citizen submits a complaint or request, the digital system allows them to track the progress of the request from submission to implementation, reducing the chances of manipulation or delay. This system helps ensure that all parties involved are accountable for the time and actions taken and serves as a powerful tool for promoting transparency and accountability (Rainer Katel and Ines 2019.p154)

3.2. Online monitoring and review

As part of the digital transformation, local authorities in Estonia can monitor and review services more effectively and transparently. Digital government provides tools to review the overall performance of local institutions and helps identify shortcomings in the delivery of public services. Citizens can track the progress of local projects online or submit complaints about any shortcomings in services. (Lehte ROOT. (2017).p 80)

This continuous oversight contributes to greater accountability among local officials, as their performance in delivering government services is tracked on a regular basis. Any delays or shortcomings in service delivery become more apparent, increasing pressure on local authorities to improve their performance and deliver better services.

The digitisation of local government in Estonia has greatly helped to promote transparency and accountability at the local government level. Through the use of digital identity, open data platforms, and digital systems for interacting with citizens, Estonia has succeeded in making government more transparent and reliable. These

transformations also contribute to improving community participation and strengthening public oversight of government performance, making the Estonian model one of the leading models in the use of technology to serve democratic goals. (Victor I. Espinosa & Antonia Pino .2024)

Despite Estonia's successes in digitising local government and promoting transparency and accountability, there are challenges that must be considered. One of the most important of these challenges is ensuring the protection of citizens' personal data, as the transition to digital systems opens the door to increased cyber risks. Therefore, the Estonian government must continue to strengthen the security of digital systems to avoid any breaches that could damage the credibility of these services.

Nevertheless, there are still many future opportunities to expand digitisation in local government. Transparency can be further enhanced by integrating modern technologies such as artificial intelligence and big data analysis to provide accurate insights into local government performance, thereby achieving greater accountability and community participation.

3. The role of local government digitisation in promoting citizen participation through digital channels in Estonia

Estonia is one of the most prominent examples of successful implementation of local government digitisation, having transformed its government services into advanced digital platforms. This digital transformation is not limited to improving the efficiency of services, but extends to enhancing citizen participation in local decision-making through digital channels. Through these transformations, Estonia has been able to provide interactive tools that make it easier for citizens to participate directly and effectively in government processes, thereby strengthening the sense of citizenship and increasing transparency and accountability in local government. (Lehte ROOT. 2017.p 80)

3.1. Digital identity (e-ID) as a tool for interaction

One of the foundations of local government digitisation in Estonia is the use of digital identity (e-ID), which allows citizens to interact with all local government services online. This digital identity is an essential tool for proving the identity of individuals in electronic transactions, ensuring that citizens can participate in local decisions securely and effectively. Through this identity, citizens can interact with local authorities to participate in electronic voting, submit complaints, and make political or social proposals, thereby contributing to their participation in improving public services. (Morten Meyerhoff Nielsen, A. (2017). P304).

3.2. Electronic voting and participation in local elections

Estonia is one of the leading countries in the use of electronic voting, as Estonian citizens can now participate in local elections and public consultations online, which

greatly contributes to enhancing political participation at the local community level. Through platforms such as i-Voting, citizens can cast their votes in local elections from their homes or any other location, facilitating access to the electoral process and encouraging active participation, especially among young people and citizens who may have difficulty getting to traditional polling stations. (Stephane remy.antoine barde.2024.p15)

3.3. Community participation and interaction with local authorities platforms

Estonia offers advanced digital platforms, such as e-Consultations and e-Petitions, which allow citizens to submit proposals and comments on local policies. Through these platforms, citizens can express their opinions on draft laws or political decisions and influence government decision-making. Citizens can submit their proposals or participate in public opinion polls conducted by local authorities, thereby enhancing direct interaction between citizens and local government.

The digitisation of local government in Estonia is not limited to interaction between citizens and the government, but also contributes to stimulating innovation in the delivery of local services. With the increasing use of digital channels, citizens can submit innovative ideas for local solutions that better meet their needs. Digital interaction opens the door for the exchange of ideas between citizens and the government and contributes to promoting innovation in the way public services are delivered. It also encourages citizens to submit development proposals for smart cities or local environmental solutions, which enhances cooperation between the government and society. (Stephane remy.antoine barde.2024.p16)

It can be said that the digitisation of local government in Estonia plays a major role in promoting citizen participation through digital channels by using innovative tools such as e-ID, e-voting, and interactive platforms. These tools allow citizens to interact with local government more easily and quickly, which enhances transparency and accountability in local government. Through this digitisation, citizens are able to influence local decision-making, which contributes to improving the quality of public services and increasing their participation in local governance processes. (Stephane remy.antoine barde.2024.p18)

Despite the great success achieved in Estonia, there are still some challenges to promoting digital participation. Among these challenges are the need to train groups that are not tech-savvy and to ensure that the digital infrastructure is inclusive of all citizens, including those in rural areas. There are also challenges related to cybersecurity and the protection of citizens' data, which is critical to maintaining trust in digital platforms. Therefore, it is essential that the government continue to develop educational and awareness tools to ensure that everyone uses these digital systems effectively and safely.

Conclusion

The study concluded that digitisation is a key element in promoting good governance at the local government level. Estonia's experience has demonstrated the role of digital transformation in improving the efficiency of public services, increasing transparency and promoting community participation. By adopting advanced technologies such as integrated electronic platforms and digital identity systems, Estonia has succeeded in overcoming traditional bureaucratic challenges and strengthening accountability. The results also show that the implementation of digital local government contributes to building citizens' trust in public institutions and reducing the gaps between the authorities and civil society, reflecting a practical integration between technological innovation and the requirements of good governance.

Recommendations:

Based on the Estonian experience, we offer the following recommendations to other governments, especially in developing countries:

1. Develop technical infrastructure:
 1. -Establish reliable and secure communication networks that ensure citizens' easy access to digital services.
 2. -Adopt advanced systems for data management and protection against breaches.
 3. Launch comprehensive electronic platforms:
 4. -Design centralised electronic portals that provide various services to citizens in an accessible and transparent manner.
 5. -Provide mobile applications to facilitate citizens' interaction with local authorities.
 2. Strengthen institutional and human capacities:
 6. Organise training courses for public employees on digital systems management and the use of technology in service delivery.
 7. Encourage research and innovation in the field of digital local administration by supporting academics and experts.
 3. Public-private partnerships:
 8. Collaborate with technology companies to develop innovative digital solutions.
 9. Attract investments to improve digital infrastructure and services.
 4. Establish legal and regulatory frameworks:
 10. Enact clear laws to protect personal data and ensure privacy.
 11. Develop regulations that encourage innovation and ensure that all parties comply with international standards.
 5. Enhancing transparency and accountability:
 12. Establish electronic systems that enable citizens to directly track their requests and complaints.
- Making periodic reports on the performance and results of local government available to the public.

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