

# Joint Master in Global Economic Governance and Public Affairs

## *Analysing Digital Governance in Kosovo: Assessing the Influence of E-Government on Citizen Participation*

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**Abstract:**

This thesis examines the transformative impact of digital technologies on e-governance, focusing on their influence on public sector operations and citizen participation in Kosovo. By analyzing various digital governance initiatives, the study aims to enhance understanding of how digital tools can improve efficiency, transparency, and civic engagement within public administration. The research employs qualitative methods, including interviews with key stakeholders and document analysis, to provide a comprehensive view of the successes and challenges faced by digital governance efforts in Kosovo.

Digital technologies have significantly changed the way governments interact with their citizens, presenting opportunities for more efficient service delivery and increased public involvement. Hence, this study explores key initiatives in Kosovo, assessing their effectiveness and identifying areas for improvement.

The findings highlight the crucial role of citizen participation in digital transformation and offer practical recommendations for policymakers to foster inclusive and effective e-governance strategies. By addressing challenges such as digital literacy, infrastructure development, and institutional coordination, the thesis aims to provide actionable insights that support the advancement of e-governance in Kosovo and similar contexts. Through this research, the study contributes to the broader understanding of digital governance and its potential to create more engaged and responsive public sectors.

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**Table of Abbreviations:**

<b>Acronym</b>	<b>Full Term</b>
AI	Artificial Intelligence
CD	Citizen Diplomacy
CTO	Chief Technology Officer
eID	Electronic Identity
e-Kosova	Kosovo's e-Government Portal
EU	European Union
GDPR	General Data Protection Regulation
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICT	Information and Communication Technologies
IoT	Internet of Things
IT	Information Technology
ITP	Innovation and Training Park
KODE	Kosovo Digital Economy Project
NAIS	National Agency for Information Society
OECD	Organisation for Economic Co-operation and Development
PPP	Public-Private Partnership
RIA	Estonian Information System Authority
SAA	Stabilization and Association Agreement
SDG	Sustainable Development Goals
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
X-Road	Estonia's Data Exchange Layer

# 1. Introduction

## 1.1 Research Scope and Objectives

As nations navigate the digital currents of the 21st century, the integration of technology into public governance stands as a transformative wave, reshaping the *very* bedrock of citizen engagement and service delivery.

This thesis focuses on the dynamic connection between e-government initiatives and public participation in Kosovo. It aims to assess how digital governance influences how people interact with public services and participate in governmental processes, as well as how citizen feedback and involvement improve the evolution of these digital initiatives.

The investigation into Kosovo's digital infrastructure underscores a significant shift towards modernizing public sector operations through enhanced internet connectivity and digital platforms. This includes comprehensive online portals like 'eKosova', which consolidate multiple services into a single, accessible interface, thus facilitating easier, more transparent interactions between citizens and the government. Such platforms are designed not only to streamline administrative processes but also to encourage greater citizen participation by making government services more accessible and efficient.

However, the effectiveness of these digital initiatives in fostering an engaged citizenry will be critically analysed. This includes delving into the user experiences of digital services to understand how these platforms either promote or hinder active civic engagement. Additionally, the study will explore how citizen inputs are integrated into the ongoing development and refinement of these digital services, assessing the responsiveness of public sector digital strategies to public needs and feedback. Addressing areas for enhancement, particularly in data security and digital literacy, remains crucial. Strengthening cybersecurity measures and enhancing the digital competencies of public officials are not just about protecting data but are also essential for building trust in e-government systems, which in turn promotes greater citizen participation. By leveraging insights from Estonia's advanced e-governance model, this research will provide a comparative perspective that highlights best practices and potential pitfalls in digital governance.

This thesis, therefore, not only contributes to the academic understanding of digital governance but also serves as a humble practical guide for policymakers in Kosovo and other similar contexts aiming to harness digital technologies for public sector improvement and active citizenry.

## 1.2 Research Questions

In exploring the transformative impact of digital technologies on governance, this thesis delves deeply into how these advancements are reshaping the public sector in Kosovo. Central to this exploration is the primary research question: "How do digital technologies influence e-governance, and what novel forms of citizen participation do they engender?". This question sets the stage for a comprehensive investigation into the ways digital tools are integrated into governance structures, enhancing or perhaps complicating the dynamics of government and citizen interaction.

The current state of digitalization and e-government in Kosovo provides a crucial backdrop for this inquiry. Assessing the existing digital infrastructure—ranging from data centres to digital service platforms like the 'eKosova' portal—helps paint a picture of how far Kosovo has come in its digital journey. These developments are pivotal for understanding both the achievements and ongoing challenges in enhancing public administration and facilitating more dynamic forms of citizen engagement. Drawing parallels with Estonia, renowned for its effective digital governance framework, the thesis seeks actionable insights that could be adapted to the Kosovo context. Estonia's experiences offer valuable lessons in creating integrated, citizen-centric digital services, which are particularly relevant as Kosovo aims to refine its own digital strategies.

The thesis also addresses the specific challenges that Kosovo faces in implementing its digital governance initiatives. These include infrastructural gaps, cybersecurity concerns, and the digital literacy levels of both the public and government officials. By identifying these challenges, the study aims to pinpoint areas where targeted improvements could significantly enhance the effectiveness of digital governance. Furthermore, the effectiveness of initiatives designed to foster citizen participation through digital platforms is critically evaluated. This analysis extends to assessing the influence of international aid projects and how they have, and also continue to shape Kosovo's digitalization efforts. Additionally, the role of digital diplomacy is explored to understand how Kosovo uses technology to enhance its international presence and the implications of these efforts on both governance and citizen engagement.

Local governance practices, particularly in the municipality of Pristina, are examined to understand how digitalization efforts are managed at the grassroots level and their alignment with national policies. This local perspective is crucial for assessing the coherence and integration of digital strategies across different levels of government.



Lastly, the thesis considers the broader societal implications of digital governance, particularly its impact on various demographic groups, including the potential challenges for older citizens who may struggle with new digital interfaces. The implications of digitalization on employment and workplace dynamics within the public sector are also considered, providing a comprehensive view of how digital transformation influences the fabric of Kosovo society. By intertwining these branches of research, the thesis aims to provide a holistic understanding of the role of digital technologies in enhancing governance and citizen participation in Kosovo. The goal is to offer well-founded recommendations that can help guide future digital governance strategies, ensuring they are inclusive, effective, and forward-looking.

### **1.3 Methodological Approach**

The methodological approach for this thesis will leverage a qualitative research strategy, focusing on the use of interviews and document analyses to gather deep insights into the implementation and impact of e-governance. The complexity of digital governance necessitates the use of qualitative methodologies, which best capture differences in policy implementation and stakeholder experiences through detailed narratives and expert testimonies.

A critical component of this approach will be the interviews conducted with key figures in Kosovo's digital governance landscape. With explicit authorization from interviewees to use their contributions, the research will include detailed discussions with government officials, representatives from international agencies, and advisors from local governments. These interviews are intended to provide first hand perspectives on the challenges, successes, and ongoing efforts in digital governance, offering a rich source of data that complements the documentary evidence. Document analysis will form another foundational pillar of the research methodology. This will involve a thorough review of relevant government reports, strategic planning documents, international assessments, and existing academic literature on digital governance. The documents will help trace the evolution of digital governance initiatives, contextualize the interview data, and identify both the progress made and the gaps that remain.

While this study is qualitative in nature, harmonization will be essential to improving the reliability and validity of the results. Hence, an ethical approach will be carefully conducted throughout the research process. Although explicit authorization to use interview data has been granted, the study will ensure that all data is handled with integrity, maintaining the

confidentiality of sensitive information, in case there is any used, and adhering to ethical research standards prescribed by the academic institution.

## 1.4 Literature Review

The literature review for this thesis on digital governance and citizen participation focuses into a broad array of scholarly materials, strategic documents, and regulatory frameworks to understand how digital technologies are transforming public administration and enhancing civic engagement, with a particular focus on Kosovo and Estonia. This review serves to not only ground the research in a robust academic framework but also to highlight the multidimensional aspects of digital governance.

The exploration of digital governance and its implications for public administration and citizen engagement is rich and diverse, with scholarly work delving into various dimensions of how these transformations are reshaping societies. The contributions from Margetts and Dunleavy (2013), as well as Luna-Reyes and Gil-Garcia (2014), represent just the beginning of a deep academic inquiry into the impacts of digital technologies on governance. Margetts and Dunleavy (2013) further illustrate this shift by noting that the widespread adoption of the internet and web technologies has fundamentally transformed public management paradigms, moving away from traditional models and towards what they describe as a '*digital-era governance*', focused on reintegration, needs-based holism, and digital transformation at all levels of government.

A significant topic of interest in the broader discourse of digital governance is the alignment of local and central government regulations, which is necessary for the successful implementation and sustainability of digital initiatives. Research shows that the coherence, or lack thereof, across different levels of governance can have a significant impact on the implementation of digital adjustments. Notably, Norris and Reddick (2013) and Bolivar (2016) look into the coordination of local and central government digital strategies, revealing both the complexity and significance of this link for cohesive public service delivery and effective governance among all levels of government. Norris and Reddick discuss the variability in how local governments adopt digital governance, which can sometimes diverge significantly from central directives due to local specificities or constraints. Bolivar explores the wider implications of these alignments, pointing out that successful digital governance requires a consistent and comprehensive approach that includes all layers of government to boost transparency, accountability, and public involvement.

These insights into policy alignment are crucial as they directly influence the effectiveness of digital governance initiatives that aim to enhance administrative efficiency and citizen engagement. This discussion naturally extends into the broader examination of how digital governance reforms are reshaping societal structures, emphasizing the need for an integrated approach across all levels of government to ensure that digital technologies fulfil their potential in enhancing public administration and civic engagement.

Following this analysis, the review returns to the broader global and local perspectives, highlighting the extensive research on digital governance in developed countries, and contrasting it with the emerging research landscape in Kosovo. This juxtaposition underscores the unique challenges faced by transitioning societies in implementing and benefiting from digital governance systems.

Building on the foundational perspectives provided by these studies, other scholars have explored the philosophical dimensions of citizen participation in the digital transformation of governance. One significant viewpoint is the idea of "digital citizenship," which refers to the capacity and willingness of citizens to engage with digital government platforms actively and effectively. The concept discussed extensively in the works of Mossberger, Tolbert, and McNeal's "Digital Citizenship: The Internet, Society, and Participation" (Mossberger et al., 2008), highlights the transformative role of citizens in shaping the digital landscape of public services. This engagement is not just passive but an active negotiation between government offerings and citizen needs, creating a form of reciprocal symbiosis between the state and society.

In addition to understanding citizen roles, there is a philosophical debate about the democratizing potential of digital governance. Some scholars argue that digital tools inherently promote a more transparent, accountable, and participatory form of governance. For instance, the writings of Charalabidis and Loukis (2012) in their study in "Government Information Quarterly" discuss how e-participation tools have the potential to enhance democratic processes by providing new platforms for dialogue, consultation, and decision-making (Charalabidis & Loukis, 2012).

However, there are also critical perspectives that caution against an overly optimistic view of technology's role in democracy. For example, Hindman (2009), in his book "The Myth of Digital Democracy," challenges the assumption that digital technologies automatically lead to democratic engagement. He argues that there are significant structural barriers in the digital space that can limit the ability of certain groups to participate effectively (Hindman, 2009). The impact of these digital shifts on the quality and accessibility of public services has also

been a critical area of study. Studies like those by Meijer, Curtin, and Hillebrandt (2012), which examine how digital platforms can both enhance and complicate service delivery, suggest that the outcomes of digital governance are contingent on how well these technologies are implemented and integrated into broader public sector strategies (Meijer et al., 2012).

Although extensive research on digital governance exists, significant gaps remain, especially in understanding its long-term effects on societal structures and its role in truly empowering citizens. These gaps highlight that while numerous studies have addressed various aspects of digital governance, the rapid evolution of technology and societal reactions to it continually present new research opportunities. There is a need to move beyond the immediate impacts and investigate how these technologies are reshaping long-standing societal norms, power dynamics, and the interactions between governments and their citizens over extended periods. Moreover, the swift pace of technological advancements necessitates ongoing scrutiny to assess their broader implications, such as issues related to privacy, security, and public trust.

Strategic documents like Kosovo's "e-Government Strategy 2023-2027" and Estonia's "Digital Agenda 2030" play a vital role in outlining each country's initiatives for integrating digital technologies into their public sectors. These strategies are essential for determining how best to implement digital initiatives that promote organizational effectiveness and citizen participation, as well as for setting the path for future advancements. Estonia's strategy, in particular, is noteworthy for its detailed presentation of initiatives such as the [e-Residency](#) and [X-Road data exchange platform](#), which have significantly advanced its digital administrative capabilities. Furthermore, the review incorporates an analysis of the regulatory landscape, particularly the implications of the EU AI Act, as discussed in recent European Commission reports. This Act proposes a framework for the ethical deployment of artificial intelligence in public administration, emphasizing the need for alignment with European values of transparency, accountability, and respect for human rights (European Commission, 2021).

In order to provide a more comprehensive international background, reports from international organizations like the World Bank and the OECD are also closely reviewed. For example, the "World Development Report 2016" from the World Bank addresses the conditions that must be met in order for the digital benefits that result from incorporating technology into governance to be fully implemented (World Bank, 2016). These findings serve as crucial for understanding the global context of digital governance and for placing Kosovo's future efforts in the broader picture.

The global landscape of research in digital governance and citizen participation is robust, featuring a broad spectrum of studies and analyses from around the world. In developed

countries, the body of literature is usually pretty extensive and detailed. However, in contrast, the situation in Kosovo presents a vast difference in the volume and depth of research available. As a newer field within the country, digital governance and citizen participation studies are relatively limited. Despite significant efforts by the Kosovar government and numerous projects supported by international organizations aimed at enhancing digital governance, there remains a prominent gap in academic research in this field within Kosovo.

While these initiatives reflect a proactive approach to adopting and integrating digital technologies within public administration, the scholarly examination and documentation of these efforts are markedly sparse. The shortage of in-depth research doesn't just make it harder to fully grasp how digital changes are really playing out in Kosovo, it also keeps Kosovo's digital governance successes and lessons from reaching a wider global audience. This scarcity is largely attributed to Kosovo's status as a transitioning society where digital governance is still developing. The lack of extensive local academic infrastructure and a smaller pool of researchers dedicated to this area contribute to the fewer studies originating from within the country.

The research we have on hand on digital governance in Kosovo tends to focus more on immediate implementation challenges rather than long-term societal impacts. These studies often aim to understand the basic framework and initial outcomes of introducing digital tools in governance rather than providing a deep dive into the prolonged effects these technologies may have on societal structures and public policy. This gap is significant as it underscores a visible need for more comprehensive local studies that can offer insights into the sustained implications of digital governance in a post-conflict, developing country context. Furthermore, the comparison between the global context and Kosovo's specific situation reveals a clear disparity in the thematic richness and empirical depth of studies. While international research explores complex issues such as digital ethics, data privacy, and the nuanced impacts of citizen engagement through technology, Kosovo's research is still attempting to address the fundamentals of implementing digital governance.

This circumstance highlights a crucial aspect of digital governance research: the significance of adapting global insights to local reality, particularly in light of the unique opportunities and constraints posed by various locations. The area of study will remain dynamic as long as digital technologies continue to advance and become increasingly integrated into public systems around the world. Yet in order to meet their specific conditions, the requirements and circumstances of countries in transition, like Kosovo, call for targeted and timely research initiatives.

Nevertheless, the presented review of the literature provides an academic foundation for understanding how digital technologies actually influence public administration on our everyday lives, by thoroughly examining the extent of digital governance and its effects on citizen involvement. By incorporating a variety of academic perspectives, as well as real-world examples, it tries to emphasize how digitalization has revolutionized government in a number of contexts, including Kosovo. Furthermore, by looking closer into the complex relationships between technology and governance, the review clearly indicates wider implications for countries pursuing digital transitions.

## **2. Exploring Digitalization and E-Governance**

### **2.1. Conceptual Frameworks and Legislative Background**

Digital transformation in governance involves integrating digital technologies to enhance public sector efficiency, transparency, and citizen engagement. Establishing a firm theoretical foundation is highly essential for understanding how digital governance impacts civic participation, too. This section outlines key conceptual frameworks, emphasizing their relevance to the study.

Hence, digital governance integrates digital technologies across all government services to enhance citizen participation. In Estonia for instance, this transformation means every government service and interaction, whether it's filing taxes, obtaining permits, or even voting, has been digitized. This comprehensive digital infrastructure allows citizens to access any government service online, simplifying processes and reducing bureaucratic hurdles. A key aspect of Estonia's digital governance is the seamless connection between various databases, allowing for secure data exchange among government entities and private companies. As such, this complicated-looking, yet extremely efficient system ensures that citizens can control who has access to their data and provides transparency by showing who has viewed their information. By leveraging digital tools to continuously improve services, Estonia sets a benchmark for how digital governance can make government operations more efficient, accountable, and responsive to the needs of its citizens.

Furthermore, the conceptual framework as proposed in the paper on digital governance by Hanisch et al. (2023), outlines a typology of governance modes—analogue, augmented, and automated—each defined by specific control, coordination, incentive, and trust mechanisms. This framework is designed to address the specific challenges posed by the proliferation of



digital technologies, which facilitate extensive data and knowledge exchange, yet also necessitate novel governance approaches to manage these interactions effectively. Additionally, it tries to distinguish between hierarchical control systems typical of analogue governance and decentralized, algorithm-based mechanisms characteristic of automated governance, while also recognizing hybrid forms where both elements coexist. This multi-dimensional and holistic approach helps in understanding the strategic trade-offs and decision-making parameters essential for effective governance in digital contexts, emphasizing the complementary roles of traditional and digital governance mechanisms (Hanisch et al., 2023).

As such, digital governance refers to using digital tools and technologies to improve public sector operations. Heeks and Bailur (2007) define digital governance as the employment of information and communication technologies (ICTs) to enhance public sector transparency, accountability, and citizen participation. This definition holistically captures various elements such as e-government, e-democracy, and e-governance, all playing vital roles in transforming public administration.

To start with, e-government uses tools to deliver public services, streamlining interactions between the government and citizens. By making these interactions more efficient and accessible, e-government initiatives aim to reduce administrative obstacles and improve the quality of service delivery. E-democracy, on the other hand, involves the usage and leveraging of digital platforms to facilitate citizen participation in democratic processes. This includes online consultations, digital voting systems, and platforms for public deliberation, fostering more direct and meaningful engagement in decision-making. Whereas, e-governance encompasses the overall framework through which digital tools are integrated into public administration to improve governance outcomes, ensuring that the use of technology supports the broader goals of transparency, efficiency, and accountability.

The concept of digital-era governance (DEG), which was introduced by Margetts and Dunleavy (2013), highlights how digital technologies have fundamentally transformed public management paradigms. DEG emphasizes three key components: reintegration, needs-based holism, and digital transformation at all government levels. Reintegration involves consolidating fragmented public services into more cohesive and accessible platforms, ensuring that citizens can access multiple services through a single interface, while needs-based holism prioritizes the design of government services to meet the specific needs of citizens rather than conforming to existing bureaucratic frameworks. This citizen-centric approach ensures that public services are more accessible and efficient, and that by embedding digital tools at all levels of government, this concept is foreseen to promote greater responsiveness

and a more integrated method of governance, ultimately enhancing the overall effectiveness and user experience of public services.

Citizen participation in the digital age is a multifaceted concept that includes various levels of engagement. Mossberger, Tolbert, and McNeal (2008) discuss digital citizenship, highlighting how digital technologies enable citizens to engage more actively and effectively with government platforms. Digital citizenship involves not only accessing information but also participating in governance processes through digital means. This can range from passive activities, such as consuming information and providing feedback, to more active engagement, such as participating in online consultations, crowdsourcing ideas for public projects, and directly influencing policy decisions through digital platforms.

Hence, empowerment through technology is a key aspect of digital governance. E-participation tools, such as online forums, surveys, and social media platforms, provide new avenues for citizens to engage with their governments. Charalabidis and Loukis (2012) discuss how these tools can enhance democratic processes by facilitating dialogue, consultation, and decision-making. By providing citizens with greater opportunities to express their views and influence governance, digital tools empower individuals and communities, fostering a more inclusive and participatory form of governance. These tools also allow governments to be more responsive to citizen needs and preferences, improving the overall quality of public services.

The interplay between technology and governance structures is complex. Fountain's (2001) technology enactment framework examines how digital technologies are embedded within organizational and institutional contexts. His framework emphasizes that the implementation of digital tools is influenced by existing power structures, cultural norms, and institutional practices. Having said this, it is safe to confirm that the socio-political context plays a crucial role in shaping digital governance outcomes, as the effectiveness of these technologies depends on how well they are integrated into existing governance frameworks. Understanding this interplay is essential for designing digital governance initiatives that are sensitive to the specific contexts in which they operate, ensuring that technological solutions are aligned with broader governance goals and priorities.

Optimistic views on the democratizing potential of digital governance suggest that digital tools can increase transparency, accountability, and citizen involvement. Proponents argue that these tools provide new channels for civic engagement and enhance the responsiveness of public officials. For example, digital platforms can make government data more accessible, enabling citizens to monitor government activities and hold public officials



accountable. They can also facilitate more direct forms of participation, such as online petitions and crowdsourcing initiatives, allowing citizens to influence policy decisions in real-time.

However, critical perspectives caution against assuming that digital technologies inherently promote democratic engagement. Hindman (2009), in "The Myth of Digital Democracy," challenges this notion by highlighting structural barriers and unequal access to digital tools that can limit effective participation. These barriers include disparities in digital literacy, access to technology, and the digital divide—a barrier also mentioned by Kosovo's CTO during an interview conducted for this thesis—which can exclude certain groups from engaging fully in digital governance. Additionally, the effectiveness of digital tools in promoting democratic engagement depends on how they are implemented and integrated into broader governance frameworks. Without careful design and implementation, digital tools can exacerbate existing inequalities and create new challenges, such as privacy concerns and the potential for digital surveillance.

Digital governance does indeed significantly impact the quality and accessibility of public services, both positively and negatively. Meijer, Curtin, and Hillebrandt (2012) discuss how digital platforms can both enhance and complicate service delivery. On one hand, digital tools can streamline processes, reduce bureaucratic bottlenecks, and make services more accessible to citizens. For example, online portals can simplify access to government services, allowing citizens to complete transactions and access information more easily. On the other hand, if not implemented effectively, these tools can create new challenges, such as technical issues, cybersecurity concerns, and the risk of excluding those who lack digital literacy. To maximise the advantages and minimise the disadvantages of digital governance initiatives, it is therefore essential to ensure that these possible challenges are taken into consideration during the design process.

Considering the legislative background, the EU Digital Act and the General Data Protection Regulation (GDPR) are the most critical legislative frameworks that influence how organizations and governments store, process, and encrypt data. The EU Digital Act, a comprehensive regulatory framework, ensures a safe and accountable online environment. It imposes obligations on digital service providers to manage risks, protect user rights, and ensure transparency. It also mandates crucial cybersecurity measures and promotes the use of advanced encryption technologies to protect personal and sensitive data from unauthorized access and breaches (European Commission, 2023).

Furthermore, the General Data Protection Regulation (GDPR) is a landmark piece of legislation enacted by the European Union to protect the privacy and personal data of EU

citizens. The GDPR imposes strict rules on data handling, processing, and storage, requiring organizations to implement appropriate technical and organizational measures to ensure data security. Key provisions of the GDPR include data protection by design and default, ensuring that organizations incorporate data protection principles into the design of their systems and processes. Additionally, it establishes data subject rights, providing individuals with the right to access, rectify, and erase their data, as well as the right to data portability (European Union, 2018).

The integration of digital governance concepts with legislative frameworks like the EU Digital Act and GDPR ensures that digital transformation efforts are secure, transparent, and accountable. These regulations provide a legal foundation for the ethical and responsible use of digital technologies in public administration. They help build trust among citizens by guaranteeing that their data is protected and that their rights are respected. By adhering to these regulations, governments can leverage digital tools to improve service delivery, enhance citizen engagement, and streamline operations while maintaining high standards of data protection and privacy (European Commission, 2023; Heeks & Bailur, 2007).

## **2.2 Impacts and Consequences of Digital Transformation**

Digital transformation in governance has far-reaching impacts and consequences, fundamentally reshaping how governments operate and interact with citizens. These changes bring both opportunities and challenges, altering the dynamics of the public sector in significant ways.

One of the primary impacts of digital transformation is the enhancement of public sector efficiency. By leveraging digital tools, governments can streamline their operations, reduce administrative burdens, and improve service delivery. For example, digital platforms automate routine tasks, freeing up public employees to focus on more complex issues. This increased efficiency is particularly evident in the processing of documents, applications, and payments, where digital systems significantly reduce the time required for these activities.

Digital transformation also greatly enhances transparency and accountability in governance. By having digital platforms enable the collection, storage, and dissemination of vast amounts of data, government operations can become more transparent. Additionally, citizens can easily access information about government activities, budgets, and decision-making processes, which helps hold public officials accountable. According to Meijer, Curtin, and Hillebrandt (2012), transparency facilitated by digital technologies strengthens public trust

and promotes a more open and democratic governance model. Another example is the UK's "gov.uk" platform, which consolidates all government services and information into a single, user-friendly portal, increasing accessibility and transparency for citizens (UK Government Digital Service, 2018).

Citizen engagement is another critical area impacted by digital transformation. Digital tools provide new channels for citizens to participate in governance processes. E-participation platforms, such as online consultations and forums, allow citizens to express their opinions, provide feedback, and contribute to policy-making. This increased engagement helps governments be more responsive to the needs and preferences of their citizens, fostering a more inclusive governance model. According to Charalabidis and Loukis (2012), these tools can enhance democratic processes by facilitating dialogue and consultation between governments and citizens. A practical example to this approach is the "Decide Madrid" platform in Spain, which allows citizens to propose, discuss, and vote on city policies directly, significantly enhancing democratic participation (Royo, Pina, & Garcia-Rayado, 2020). Additionally, in India, the Aadhaar system, a unique biometric identification project, has streamlined access to a range of public services, from banking to welfare programs, making them more accessible to millions of citizens (UIDAI, 2020).

However, as any other evolutionary transition, the shift to digital governance does, of course, present significant challenges. According to Kosovo's Chief Technology Officer, one major concern is the digital divide, which refers to the gap between those who have access to digital technologies and those who do not. This divide can exacerbate existing inequalities, as marginalized groups may be excluded from the benefits of digital transformation. To support his point, insight from Hindman (2009) discusses how structural barriers, such as lack of access to technology and digital literacy, can limit effective participation in digital governance. Hence, addressing the digital divide requires targeted policies and initiatives to ensure that all citizens can benefit from digital services.

Digital transformation is also linked to a crucial issue: cybersecurity. As governments increasingly rely on digital systems to deliver services and store data, they become more vulnerable to cyberattacks. Maintaining the public's trust and safeguarding sensitive data depend heavily on the security and integrity of digital infrastructures. Strong cybersecurity measures must be taken for this, such as the adoption of advanced technologies, ongoing testing, and the training of a workforce with the necessary expertise.

The introduction of digital tools also brings about changes in the workforce and workplace dynamics. Automation and digitalization can lead to job displacement, as certain

tasks become obsolete. However, it also creates new opportunities for employment in the digital economy. Governments are actively investing in reskilling and upskilling programs to ensure that public employees can adapt to changes and seize new opportunities, thereby maintaining a workforce that is relevant and capable of meeting the demands of a digitalized public sector.

For instance, in Kosovo the digital transformation process has brought about significant improvements in transparency and accountability. Systems like the open data portal and the electronic system for public officials' property declarations have made government data more accessible and have enhanced public scrutiny. However, the CTO continuously emphasizes the importance of addressing cybersecurity concerns to ensure that the benefits of digital transformation are widely shared.

Several legal frameworks have been established to tackle these challenges, both globally and locally. For example, the European Union's General Data Protection Regulation (GDPR) ensures data protection and privacy, while the OECD's guidelines on digital identity governance enhance the security and usability of digital identities. Additionally, the Council approved a ground-breaking law in May 2024 aiming to harmonize rules on artificial intelligence, known as the Artificial Intelligence (AI) Act. This flagship legislation follows a 'risk-based' approach, meaning that the higher the risk an AI system poses to society, the stricter the rules it must follow. It is the first of its kind in the world and has the potential to set a global standard for AI regulation. These frameworks collectively provide a foundation for addressing the complexities of digital governance, ensuring that technological advancements are accompanied by strong legal protections for citizens.

The digital transformation in governance has brought about remarkable changes, and even greater impact, vastly improving the efficiency, transparency, and engagement levels within the public sector. This whole journey does indeed hold transformative potential to revolutionize public sector operations, enhancing efficiency, transparency, and citizen engagement and it represents a fundamental change in how governments interact with their citizens, as well as manage public resources. While the transition to digital governance presents significant challenges, addressing these through strategic policies, investments in technology, and fostering digital literacy can ensure that the benefits of digital transformation can be realized inclusively, ultimately leading to a more responsive and accountable governance framework.

### **2.3 Overview of the E-Governance Landscape**

Following the exploration of the impacts of digital transformation, it is crucial to examine the evolving landscape of e-governance. This domain encapsulates the efforts by governments worldwide to integrate digital technologies into public administration, aiming to enhance service delivery, streamline operations, and foster greater engagement with citizens. The landscape of e-governance has been shaped by various national strategies and the ongoing challenge of modernizing public sector processes.

A key aspect of e-governance is the deployment of centralized digital platforms that consolidate a multitude of government services. These platforms enable citizens to perform diverse tasks online, from applying for permits to accessing public records. Estonia serves as a prominent example, having extensively digitized its government functions, ensuring seamless and secure online access to services (Goode & Lichfield, 2023). Central to Estonia's success is the "once-only principle," which mandates that information provided by citizens is collected only once and reused across various services, minimizing redundancy and enhancing efficiency (Ilves, 2023). Kosovo's CTO also emphasized, "Our principles draw from best practices of countries successful in digital transformation. The once-only principle ensures that if the government has certain information, it should not be requested again from citizens. This principle is supported by our interoperability platform, which connects over 50 systems, facilitating information exchange between institutions."

Another country inspired by Estonia's model, Ukraine, offers a compelling case study through the development of its 'Diia' platform. Launched in 2019, the Diia platform aimed to create a "government in a smartphone" by making public services more efficient, transparent, and accessible, even in battlefields. Alex Bornyakov, Ukraine's Deputy Minister for Digital Transformation, highlights the vision behind Diia: to substitute automatic scripts for bureaucratic processes, thus reducing corruption and making government more user-friendly (Paulson, 2023). This approach aligns with Estonia's principles but adds a unique Ukrainian perspective to the implementation of e-governance.

Ukraine's Diia platform set ambitious goals, aiming to put 100% of government services online, with 20% fully automated. This included digital driver's licenses and passports, which rapidly gained traction among Ukrainians. The platform's design ensured that each account was easy to create and secure, using biometric verification and temporary QR codes for document validation (Paulson, 2023). This user-centric design made government interactions more accessible and less intimidating, much like Estonia's approach but tailored to Ukraine's specific needs.

All of the countries mentioned above emphasize the importance of giving permission for data usage in building trust within their digital systems. In Ukraine, the Diia platform allows citizens to control access to their data, ensuring privacy and security. Specific access levels are granted to government offices or private vendors based on their need to know, ensuring that sensitive information remains protected (Paulson, 2023). Similarly, Estonia's model allows citizens to monitor who accesses their data and for what purpose, addressing privacy concerns effectively (Ilves, 2023). These strategies highlight the shared priority of transparency and data security in successful e-governance.

Social media and digital communication tools are also integral to modern e-governance, providing governments with platforms to engage with citizens, disseminate information, and gather feedback. During crises, such as the ongoing conflict in Ukraine, these tools become essential for real-time updates and situational awareness (Bertot, Jaeger, & Hansen, 2012). The Diia platform has demonstrated this capability by quickly adapting to wartime needs, such as providing digital passports for displaced citizens and enabling quick enrollment in cash assistance programs (Paulson, 2023).

Despite these advancements, the e-governance landscape faces significant challenges. Digital inclusion remains a major issue, with the digital divide limiting the effectiveness of e-governance initiatives. This divide exacerbates existing social and economic inequalities, highlighting the need for inclusive digital policies to ensure broad access to digital services (Norris, 2001). For instance, the age distribution of Estonia's population has shown that while the proportion of individuals aged 0-14 remains relatively stable, there has been a significant increase in the population aged 65 and older over the past decade. This demographic shift underscores the importance of digital inclusivity, particularly for older adults who may be less familiar with digital technologies (Statista, 2022). Both Estonia and Ukraine have recognized this challenge and are working to implement solutions that bridge this gap.



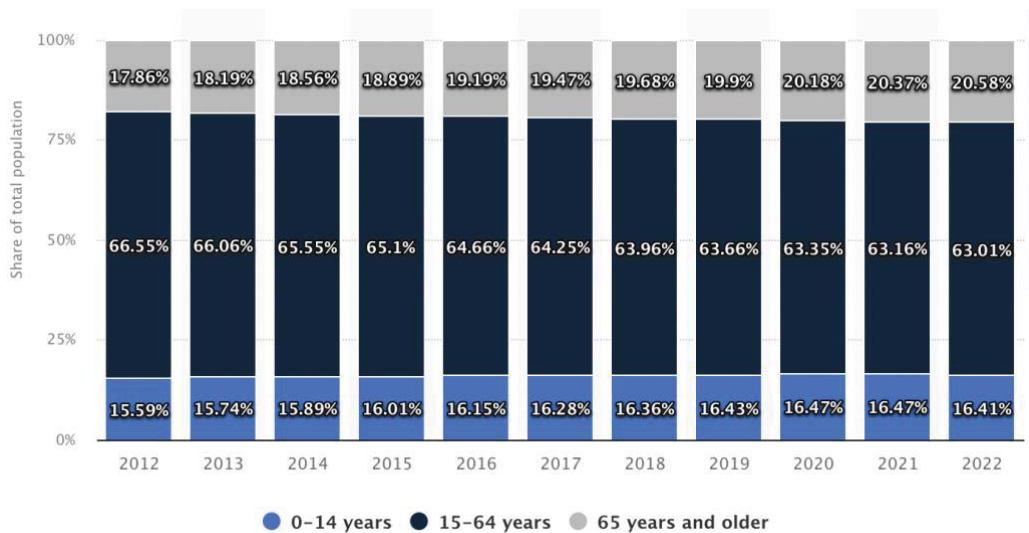


Figure 1: Age distribution of Estonia's population from 2012 to 2022 (Statista, 2022).

Cybersecurity is another critical concern in e-governance. The increasing reliance on digital systems heightens the risk of cyberattacks, necessitating stringent security measures to protect sensitive data and maintain the integrity of digital services. The European Union's General Data Protection Regulation (GDPR) exemplifies the high standards required to safeguard personal data in the digital age (European Commission, 2018). Estonia and Ukraine have both implemented robust cybersecurity measures to protect their digital infrastructures, reflecting the global importance of this issue.

Intergovernmental collaboration is key in advancing e-governance. Countries benefit from sharing knowledge and best practices, adapting successful strategies to their contexts. For instance, the partnership between Kosovo and Estonia facilitated by the e-Governance Academy demonstrates the value of international cooperation in digital governance (e-Governance Academy, 2023). Similarly, Ukraine has drawn inspiration from Estonia's digital strategies while tailoring its approach to meet local needs.

Digital technologies offer enhanced public sector efficiency, transparency, and engagement, revolutionizing how governments interact with their citizens and manage public resources. Yet, it is the well-implemented digital strategies the ones that demonstrate the transformative potential of these technologies, allowing seamless access to a wide range of services and fostering a more responsive and accountable governance model. However, addressing issues like digital inclusion and cybersecurity is crucial for fully realizing the benefits of e-governance. As mentioned by Kosovo's CTO, digital divide remains a significant barrier, with marginalized communities often lacking access to necessary technologies and digital literacy skills, exacerbating existing social inequalities. Cybersecurity threats, on the

other hand, pose risks to the integrity and confidentiality of sensitive data, necessitating robust measures and continuous vigilance.

Moreover, the integration of artificial intelligence and machine learning into e-governance systems presents both opportunities and challenges. While these technologies can enhance decision-making processes and service delivery, they also raise ethical and regulatory concerns that need to be carefully managed. The implementation of clear guidelines and frameworks, such as those being developed by the United Nations and other international bodies, will be essential in ensuring that these technologies are used responsibly and equitably.

The continuous evolution of e-governance strategies and international collaborations will be key in navigating this complex yet promising domain. Countries can learn from each other's successes and failures, adapting best practices to local contexts and fostering innovation through shared knowledge and experiences.

Ultimately, the goal is to create a more inclusive, secure, and efficient public sector that can effectively meet the needs of all citizens in the digital age. In conclusion, while digital governance holds great promise for enhancing public sector operations, addressing the associated challenges is crucial for its success. The digital divide, cybersecurity, data privacy, resistance to change, digital exclusion, and rapid technological advancements are significant bottlenecks that must be dealt with.

### **3. Comparative Analysis: Evaluating e-Governance Strategies in Estonia and Kosovo**

#### **3.1 Comparative Examination of Digital Governance Models**

Digital governance has become a must for an effective government in the modern era, leveraging technology to enhance services, engage citizens, and optimize operations. This section provides a detailed comparison of the foundational digital governance frameworks in Estonia and Kosovo, emphasizing their strategic approaches, infrastructural elements, and legislative support.

When the phrase "digital governance" is mentioned, Estonia often stands out as a pioneer, and rightly so. The country's journey towards digital transformation began in the 1990s following its independence from the Soviet Union. The X-Road's foundational infrastructure, which is the backbone of Estonia's digital transformation, supports a range of digital services, including the 2014-launched e-Residency program, the i-Voting system introduced in 2005, Digital ID and Mobile ID systems, as well as a comprehensive e-Health and e-Justice system.



These initiatives reflect Estonia's strategic vision of integrating technology into public administration (e-Estonia, 2023). Estonia conducted the very smart approach of proactively investing in its IT infrastructure and understanding that innovation is a crucial factor to its success in digital governance. The e-Residency program, for instance, provides individuals worldwide with a digital identity issued by the Estonian government, allowing them to establish and manage businesses online, access various services, and sign documents digitally. This groundbreaking initiative has attracted a global community of entrepreneurs, freelancers, and digital nomads, significantly boosting Estonia's economy and fostering a digitally-driven business environment. Similarly, the i-Voting system has revolutionised the electoral process by allowing citizens to vote online using their secure digital IDs. This system has greatly increased voter turnout, with a new record set during the 2023 parliamentary elections, reflecting growing trust in online voting. The voter turnout in 2023 reached 63.5%, maintaining a consistent engagement rate comparable to previous years.

Voter turnout				
Year	Population (1 January)	Voters	Voted	Voter turnout (%)
2023	1 365 884	966 129	613 801	63.5
2019	1 323 824	887 420	565 045	63.7
2015	1 313 271	899 793	577 910	64.2
2011	1 329 660	913 346	580 264	63.5
2007	1 342 920	897 243	555 463	61.9
2003	1 375 190	859 714	500 686	58.2
1999	1 379 237	857 270	492 356	57.4
1995	1 448 075	791 957	545 801	68.9
1992	1 554 878	689 319	467 628	67.8

Figure 2: Voter turnout data for Riigikogu elections from 1992 to 2023 (Valimised, 2023). Retrieved from [Valimised](#).

Additionally, Estonia's Digital ID and Mobile ID systems introduced in 2002 provide secure electronic authentication and digital signatures, allowing citizens to securely access a wide range of services, from banking to voting via mobile phones. This creates an unseen-before, secure interaction between citizens and the government.

Moreover, Estonia's e-Health system integrates health records and services into a single platform, improving healthcare delivery and administrative efficiency through features like e-prescriptions and digital medical records. The e-Justice system offers tech solutions for legal processes, including online court systems and electronic case management, making the legal

system more accessible and efficient. Estonia also employs KSI Blockchain technology to ensure the integrity of government data, enhancing security and trust by providing an immutable and auditable record (e-Estonia 2023).

In contrast, or better to say inspiringly, Kosovo, while newer to digital governance, has taken significant steps towards digitalisation since its declaration of independence in 2008. The e-Kosova portal, which will be further explained in the following sections, offers a unified platform for accessing various government services. The e-Government Strategy 2023-2027 and the broader Digital Agenda 2030 outline Kosovo's vision for becoming a digitally advanced nation by 2030, however, there are additional documents that complement the country's path towards digitalisation, such as the previous Electronic Governance Strategy 2009-2015, Better Regulation Strategy 2017-2021, Strategy for Modernisation of Public Administration 2015-2020, the more recently approved Public Administration Reform Strategy 2022-2027 and the Administrative Burden Prevention and Reduction Programme 2022-2027. Looking from the institutional perspective, it is the National Agency for Information Society (NAIS) the one that plays a key role in coordinating digital projects and promoting tech literacy among citizens (Government of Kosovo, 2023).

The country is continuously redesigning services to be more inclusive and responsive to citizen needs based on citizen feedback. However, as one would suppose, the implementation approaches in Estonia and Kosovo reflect their different stages of digital maturity. Estonia's long-term strategic planning and progressive development, supported by a comprehensive legislative framework, ensure that digital governance evolves with technological advancements. Additionally, its well-established cybersecurity system, overseen by the Estonian Information System Authority (RIA), protects its digital infrastructure from external threats, maintaining public trust and ensuring efficient digital service operations.

Similarly, Kosovo's strategy emphasizes coordination among various government entities and foundational development to support sustainable digital growth and innovation. Guided by its Cybersecurity Strategy, Kosovo, too, aims to protect critical information infrastructure and build public trust in digital activities. As mentioned above, the National Agency for Information Society (NAIS) plays a crucial role in overseeing the policy implementation, providing technical support, and fostering digital competency among citizens.

Both Estonia and Kosovo illustrate varied paths and challenges in digital growth and innovation yet following the same vision. Estonia demonstrates the benefits of advanced infrastructure and ongoing innovation, by offering a clear 'success-story' example to follow for successful digital governance. The country's experience highlights the importance of long-

term strategic planning and continuous innovation in achieving digital governance efficiency. Kosovo, although at an earlier stage, does show promise indeed, especially through its strategic focus on foundational development and skill enhancement, as well as its motivation to proceed the governmental cooperation with Estonia in this regard.

In summary, the comparative examination of Estonia and Kosovo's digital governance models reveals that the spotlight on user-centric services is a key driver for continuous innovation in both countries. By prioritizing the needs and preferences of their citizens, both Estonia and Kosovo aim to ensure that digital services are accessible, efficient, and user-friendly. Estonia's advanced infrastructure and progressive policies highlight the advantages of mature digital governance, while Kosovo underscores the importance of building strong foundational frameworks for future growth.

### **3.2 Comparative Study of Digital Governance Initiatives**

In today's tech-driven world, not integrating sophisticated technologies into government processes makes things very difficult in a global perspective. Hence, understanding how digitalization influences governance and enhances citizen engagement is exceptionally important to improving government efficiency. This section delves into specific digital governance initiatives undertaken by Estonia and Kosovo, analyzing their implementation, objectives, and outcomes.

One of Estonia's early and crucial decisions in its digital governance was to introduce a digital identity card (ID-card). This ID-card was made mandatory and served as a fundamental tool for recognizing individuals in the digital sphere, effectively linking their real-world identities with their digital ones (OECD, 2020). This was then followed by the infamous X-Road platform, a data exchange layer that links over 170 databases

However, the e-ID system is seen as a revolution in Estonia's digital transformation journey, providing every citizen with a digital identity that facilitates access to a multitude of e-services. This includes the e-Tax Board, which simplifies tax filing to a matter of minutes, and the e-Cabinet system, which enhances governmental efficiency by allowing ministers to prepare and conduct meetings online, drastically reducing session times. Additionally, the country also offers innovative services like e-Banking, where nearly all transactions are conducted online, supported by initiatives that promote the use of digital IDs (e-Estonia).

One of the e-services that is used the most recently and was highly useful during the COVID-19 pandemic, is the educational platform called the 'e-School'. It allows parents,

students, and teachers to track academic progress and communicate effectively, fostering a collaborative educational environment. Furthermore, in healthcare, the e-Health system integrates data from various providers into a single electronic health record for each patient, improving service delivery and emergency care. The e-Residency program extends the benefits of Estonia's digital infrastructure to non-residents, enabling them to establish and manage businesses online from anywhere in the world (e-Estonia).

Understandably so, cybersecurity is the foundation of Estonia's digital ecosystem. With all this data being thrown in systems, there's no other way but to take cybersecurity rather seriously. That's also why the country has implemented secure identification and data exchange systems, which were tested during cyber-attacks throughout the years. Estonia's ability to manage these attacks without significant disruption showcased the firmness of its cyber defenses. As a result, the national cyber security strategy prioritizes the protection of personal data and secure digital interactions, ensuring the trust and safety of its digital services (OECD, 2020).

On the other hand, Kosovo's digital governance journey is at a more nascent stage with an e-Government Strategy that outlines its vision to become a digitally advanced nation by 2030, showing that it has a lot to do in order to reach Estonia's digital maturity.

Nevertheless, at the Conference on E-Government Strategy that took place in April 2023, Kosovo's Prime Minister Albin Kurti, showed great enthusiasm for the field by emphasizing that the new E-Government Strategy 2023-2027 which sets a vision for a digitized public administration aimed at enhancing citizen well-being, and sustainable economic growth, also includes significant reforms based on the European Commission's principles for service digitalization, transforming how citizens interact with public administration. In addition, he mentioned that Kosovo's Technology Maturity Index ranking improved from group C to B.

This strategy, that was drafted with the assistance of Estonia's E-Governance Academy, emphasizes key areas such as coordination, digital competencies, interoperability, digital services, cybersecurity, and innovation and its approach is rooted in principles aligned with the European Commission's standards, focusing on "digital by design" and "once-only" principles, which aim to reduce redundancy and enhance efficiency (Kosovo e-Government Strategy, 2023).

Comparatively, Estonia's advanced digital ecosystem provides a benchmark for Kosovo. Estonia's success stems from its early adoption of a comprehensive legal framework, continuous innovation, and a strong focus on user-centric services. Kosovo, while still

developing its digital infrastructure, is making continuous progress with a clear strategic vision and commitment to building an efficient digital governance framework.

As a developing country, it is expected that Kosovo faces challenges such as enhancing IT infrastructure, improving digital literacy among public officials, and fostering a culture of innovation. However, the government in place shows the motivation to ensure coordination among governmental bodies and establishing clear roles and responsibilities which are critical for a successful digital transformation. It is also clear to the decision-makers that building public trust through cybersecurity measures and transparent processes is essential for encouraging the adoption of digital services. More so, Estonia's e-governance model offers valuable lessons for Kosovo, and by adapting Estonia's best practices and leveraging its unique strengths, Kosovo can indeed build a resilient and inclusive digital governance framework.

### **3.3 Lessons Learned from International Cases**

Examining global experiences provides essential insights into refining and enhancing e-governance strategies. Various international cases offer lessons that highlight best practices, common challenges, and innovative solutions, significantly boosting the effectiveness of e-governance initiatives in countries like Estonia and Kosovo.

This section synthesizes key lessons from international e-governance experiences, offering insights and best practices that can enhance Kosovo's digital governance efforts. A primary takeaway from Estonia's e-governance journey is the importance of a well-defined strategic vision supported by a comprehensive framework. Estonia's "Tiger Leap" initiative, which introduced computer labs to schools in the 1990s, exemplifies how early investments in technology can cultivate a digitally literate population capable of driving future digital services (Jejenywa, Mhlongo & Jejenywa 2024). This foundation has been highly important in shaping Estonia's advanced digital ecosystem and continues to still support its evolving e-governance landscape.

In comparison, Kosovo's strategic efforts emphasize foundational development. By focusing on establishing sturdy digital infrastructure and enhancing digital literacy, Kosovo is laying the groundwork for more sophisticated e-governance initiatives. Additionally, as a lesson learned from Estonia, Kosovo is continuously investing, both internally and through development aid, in the training of its civil servants with regards to digital transformation. As such, the emphasis on education and foundational digital skills mirrors both Estonia and

Kosovo's initial steps, highlighting the importance of building a knowledgeable citizen and governmental base to support digital governance.

International experiences underscore the significance of user-centric service design. For instance, the United Kingdom's Government Digital Service (GDS) focuses on building digital services that meet users' needs through a 'never-ending' user research and testing. This user-centric approach has significantly enhanced the accessibility and effectiveness of digital government services in the UK (Dunleavy, Margetts, Bastow & Tinkler 2006).

Similarly, by prioritizing user-centric services, both Estonia and Kosovo aim to ensure that digital services are accessible, efficient, and user-friendly. Moreover, stringent cybersecurity measures are crucial for successful digital governance. South Korea's advanced e-government infrastructure includes comprehensive legal frameworks supporting digital transformation across various sectors. South Korea's Government 3.0 initiative leverages big data, cloud computing, and social networking services to create a transparent, competent, and service-oriented government (Lee, Tan & Trimi 2005). This model highlights the importance of integrating advanced technologies to enhance security and public trust in digital services.

In addition, Sweden's e-government strategies emphasize public-private partnerships (PPPs) and sound data protection laws, maintaining high standards of service delivery and public trust (ACM 2022). Additionally, lessons from Singapore's Smart Nation initiative illustrate the benefits of integrating digital technology into all aspects of life, including healthcare, transportation, and urban planning. This holistic approach fosters collaboration between government, industry, and citizens to co-create solutions that address urban challenges and improve public services (Chan 2015). For Kosovo, adopting a similar comprehensive approach could enhance various sectors and improve the overall quality of life.

Moreover, Canada's Digital Government Strategy provides another valuable perspective. Canada's focus on building a digital government that is open, collaborative, and accessible includes initiatives such as the Open Government Portal, which provides citizens with easy access to government data and information. This transparency fosters greater public trust and engagement (Roy 2013). By enhancing transparency and accessibility, Kosovo can similarly build trust and encourage active citizen participation in digital governance.

Despite these successes, several challenges and barriers are commonly encountered in e-governance. Additionally, the OECD's analysis of digital security during the COVID-19 crisis emphasizes the need for preparedness, flexibility, and agility in managing digital security risks. The crisis highlighted the increased vulnerabilities in sectors such as healthcare and small businesses, stressing the necessity for robust digital security frameworks (OECD, 2020). Many



African countries, for instance, face limited internet connectivity and inadequate technological infrastructure, hindering the effective implementation and scaling of e-governance services (Munyoka & Manzira 2014). Whereas, as of January 2024, Kosovo's internet penetration rate stood at 95.7% of the total population (DataReportal, 2024), showing its readiness towards a firm digital transformation.

Ensuring legal and regulatory frameworks are supportive of digital transformation is essential, as outdated or overly complex regulations can impede innovation and the agile development of e-governance services. Socio-economic disparities and varying levels of digital literacy can also exacerbate the digital divide, limiting access to e-governance services for certain populations. Ensuring the privacy and security of digital transactions and personal data remains a significant challenge affecting public trust in e-governance services. Effective stakeholder engagement is crucial, as inclusive participation and addressing conflicting interests can be challenging (Lněnička & Máchová 2022).

From these experiences, several best practices have been identified to enhance the success of future e-governance initiatives. Developing comprehensive e-governance strategies with clear objectives, stakeholder roles, technology requirements, and performance indicators is critical. Planning should be iterative, allowing for adaptation to technological advancements and changing societal needs. In a recent podcast, Estonia's former CIO, Luukas Ilves, highlighted Estonia's digital transformation journey and the lessons learned.

He emphasized the importance of having a forward-thinking government, a proactive ICT sector, and a tech-savvy population. Ilves discussed the critical role of trust and security in Estonia's digital services, which have been paramount in gaining public confidence and widespread adoption (Lichfield & Goode, 2023). Additionally, inclusive policy-making should adopt a participatory approach, as Kosovo has already started to do, by involving all relevant stakeholders in the design and implementation of e-governance services to ensure they are accessible, equitable, and user-friendly.

Collaborating with the private sector, startups and chambers of commerce to leverage their expertise, technologies, and resources through public-private partnerships can provide innovative solutions and funding models for e-governance services. Designing e-governance projects with sustainability in mind, considering long-term maintenance, scalability, and the continuous improvement of services is beyond crucial. Hence, promoting open standards and ensuring interoperability among e-governance systems is key for integration, reducing costs, and encouraging innovation.

Regularly reviewing and updating legal and regulatory frameworks to support digital transformation, with a focus on data protection, cybersecurity, and digital identity, is essential. By adhering to these best practices and learning from past experiences, countries can continue to evolve and overcome challenges, leveraging digital technologies to improve governance and service delivery effectively.

To conclude, the experiences of Estonia and Kosovo, along with insights from international cases, underscore the importance of strategic vision, user-focused design, institutional support, iterative development, inclusivity, digital literacy, and adaptation to new technologies. By integrating these best practices, but most importantly global cooperation, nations can indeed develop effective e-governance strategies that actually leave an imprint in the society.

## **4. Case Studies: E-Government Initiatives and Collaborative Projects**

### **4.1 Analysis of Kosovo's E-Government Initiatives**

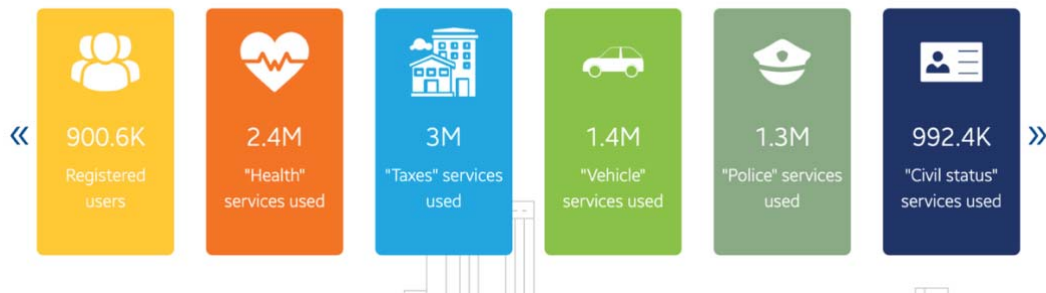
Kosovo continues to pursue e-government initiatives, reflecting its ongoing commitment to digital governance. While there has been notable progress in areas such as transparency, accountability, and efficiency, the journey is ongoing, and challenges remain. More so, the government's efforts to expand its digital framework and introduce new projects underscore the importance of continual improvement in public administration and service delivery.

To start with, the 'backbone' initiative of the country is the e-Kosova portal, which serves as the main digital interface for citizens and businesses, offering a wide range of services. This platform simplifies access to government services, such as applying for documents, accessing public records, and providing feedback on government services (Kosovo Government). Undoubtedly, the platform gained huge visibility during the COVID-19 pandemic, as citizens could fulfill a lot of their civic duties online, without having to leave their homes.

According to Kosovo's Prime Minister, Albin Kurti, there are over 155 electronic services offered on the e-Kosova platform. Recently, the platform added the service of submitting high school diploma exams, announcing results, and preparing electronic certificates. As of May 2024, the e-Kosova platform has seen substantial engagement, with over 900,600 registered users actively utilizing its services. The platform has facilitated 2.4



million "Health" services, 3 million "Taxes" services, 1.4 million "Vehicle" services, 1.3 million "Police" services, and 992,400 "Civil status" services (E-Kosova Platform, 2024).



**Figure 3:** User engagement and service usage on the e-Kosova platform as of May 2024 (E-Kosova Platform, 2024). Retrieved from <https://ekosova.rks-gov.net/>.

This extensive usage reflects the platform's significant role in streamlining access to essential government services, enhancing convenience, and promoting efficiency in public administration. The primary goal of these initiatives is to streamline administrative processes, reduce bureaucratic bottlenecks, and make government services more accessible and user-friendly. Furthermore, the open data portal provides access to various government datasets, promoting transparency and allowing for public scrutiny and innovation. This portal is part of a broader strategy to build a data governance framework that ensures most data created by the government is accessible in a machine-readable format, fostering transparency and innovation (E-Government Strategy).

Furthermore, with support from the Estonian e-Governance Academy, Kosovo has developed a comprehensive cybersecurity strategy that includes legislative aspects, public awareness campaigns, and the protection of critical infrastructure. This strategic approach ensures that digital transformation efforts are secure and that citizens' data rights are protected. Moreover, according to the CTO, the life event approach to service delivery is being piloted to enhance the user experience by reorganizing services around significant life events such as the birth of a child, starting a business, or changing an address. This approach shifts the focus from institution-centred to citizen-centred service delivery, thereby improving the efficiency and relevance of public services.

The government's commitment to transparency is further exemplified by its development of a transparency portal for public expenditure. This portal increases transparency in public spending, allowing citizens to scrutinize government expenditures and hold officials accountable. Additionally, Kosovo's Agency for Prevention of Corruption uses an electronic

system for public officials' property declarations and makes this information accessible to the public.

Kosovo's CTO also mentions that a very important and recent initiative that the government has introduced, is the e-Consultations platform, which enables citizens to provide feedback on governmental policies and legislations, before they go to vote in the parliament. This platform enhances transparency and fosters greater civic participation, ensuring that citizen feedback is actually considered in policy-making processes.

The adoption of the once-only principle is an imperative aspect of Kosovo's digital transformation. This principle ensures that if the government already possesses certain information, it should not be requested again from citizens, and this is the key driver to all the initiatives the country has undertaken.

#### **4.2 Examination of Specific E-Government Projects in Kosovo**

International aid has historically been vital in helping Kosovo rebuild and develop after the war, laying the foundation for its recovery and growth. Today, several organizations are collaboratively and simultaneously investing heavily in Kosovo's digital transformation journey, ensuring the country continues to progress and thrive in the digital age. Hence, several specific e-government projects highlight Kosovo's commitment to digital governance.

One notable project is the World Bank's digital governance loan, where Kosovo secured a €20 million loan to support digital governance, focusing on service delivery improvements and increased transparency. The project aims to enhance digital infrastructure, institutions, and skills for citizen-centric service delivery, and is foreseen to improve government system interoperability, disaster recovery, expand e-services through an upgraded e-Kosova, and pilot the life event-based service delivery approach. (World Bank, 2023).

Furthermore, the EU Integration Reform Processes Project, funded by the German government, supports Kosovo in strengthening its public administration to implement EU-related reforms. The project aims to harmonize policy implementation, improve administrative enforcement, enhance access to justice, and promote environmental governance. It builds upon previous initiatives and aims to align Kosovo's governance frameworks with EU standards (GIZ, 2023).

In line with these goals, the GIZ Kosovo project, labelled as the Administrative Burden Reduction, focuses extensively on reducing administrative burdens through digitalization. Most of the energy and resources in their digitalization portfolio are directed towards software

development projects. According to one of the project advisors, these projects are designed to deliver products that will eventually be maintained by government institutions. For instance, the EU Service Directive, which requires the digitalization of processing licenses and permits, involves collaboration with several ministries responsible for these domains. Hence, this initiative directly supports Kosovo's efforts to reach EU membership maturity by aligning its administrative processes with EU standards (Advisor at GIZ Kosovo, 2024).

Additionally, one of the main initiatives of the project is the 'baby is born' life event service. This project facilitates the registration of newborns in the civil registry and subsequently triggers a range of related service, as it cohesively aims to lay the groundwork for personalized and proactive service delivery in the future. Furthermore, GIZ Kosovo supports the Agency for Information Society to expedite the onboarding of services onto the 'e-Kosova' platform. The project also includes legal simplification analyses, capacity-building trainings for public officials, and awareness-building activities such as conferences and trainings (Advisor at GIZ Kosovo, 2024).

These activities specifically improve service delivery and administrative processes by reengineering for simplification and integrating digital services into new delivery methods. This 'multi-channel' approach does indeed simplify procedures, and also the outcomes include digital services that reduce administrative burdens and enhance accessibility, contributing to a better business environment and increased citizen satisfaction.

An added value of the project is that its initiatives align well with broader goals like EU integration and digital transformation. As the project is co-funded by the EU, this alignment follows the 'Fundamentals First' approach, addressing specific EU integration priorities such as the EU Service Directive, a key regulation within the Single Market Acquis.

Digitalization efforts are closely coordinated with the Chief Technology Officer's office, ensuring they align with the e-Government Strategy for Kosovo, as well. Regular planning meetings and participation in events by the Chief Technology Officer highlight the strategic coordination of these efforts, and according to the project advisor, the life event project activity is highly significant as it is the first of its kind in Kosovo, and it is expected to provide valuable lessons for future life event projects (Advisor at GIZ Kosovo, 2024).

To complement the multi-stakeholder approach, in partnership with various institutions, UNDP Kosovo has embarked on a mission to advance digital transformation as a contributing factor to achieving the Sustainable Development Goals (SDGs). Their focus on digitalization involves promoting institution-wide projects and adopting a holistic approach to digital transformation, including policy engagement, creating an enabling legal environment, agile

systems, and continuous experimentation. The 2021-2025 Kosovo Programme launched by UNDP aims to foster Kosovo’s green and digital transformation and implement a Digital Transformation Portfolio with tailored-made activities (UNDP, 2021).

With a young population, growing innovation and technology ecosystem, basic internet infrastructure in place, and prospects for EU accession, Kosovo has shown potential to be a leader in digital transformation. However, limited data sharing and lack of coordination across institutional mechanisms lead to manual work, slowing down the potential of digital transformation. The Digital Household Survey (2022), conducted by the UNDP, found that Kosovo has indeed high technology access and internet penetration, yet the technology use within the education system and digital literacy rates with complex tools are low.

There is a significant divide between using communication tools (e.g., social media) and productivity tools (e.g., Microsoft Office or Excel), with even steeper declines in skills like coding and data analysis, which are crucial for the digital economy (UNDP, 2022). The following graph from the Digital Household Survey illustrates these disparities, highlighting high overall internet access but limited integration of technology within educational systems and the pronounced digital literacy divide.



**Figure 4:** Digital Household Survey 2021 results highlighting internet access and digital literacy gaps (UNDP, 2022). Retrieved from [UNDP Kosovo](#)

Taking these results into consideration, the Kosovo government pushed for its Digital Agenda 2030 to outline a comprehensive plan to further digitalize public services and improve digital literacy among citizens. This strategic document reflects the government's long-term

vision for a digitally empowered society, aiming to integrate digital technologies across various sectors and enhance overall governance (Kosovo Government, 2023).

To avoid activity overlapping, the USAID Economic Governance Activity aims to enhance the business environment by improving economic governance and public financial management. This project supports reforms that promote transparency, reduce corruption, and streamline regulations, thereby fostering a more business-friendly environment (USAID, 2023).

According to the CTO, to further complement the impact of these projects from the government side, the life event approach to service delivery is a key initiative that reorganizes public services around key life events such as the birth of a child or starting a business, making government services more intuitive and user-friendly. This approach is part of a broader effort to shift from institution-centred to citizen-centred service delivery, ensuring that public services are tailored to the needs of citizens (CTO, 2023). Additionally, the open data initiative, as part of Kosovo's digital governance strategy, has had a significant impact, by continuously pushing for government data to be accessible to the public. The open data portal allows for the cross-linking of data sets, enabling new insights and fostering innovation in the private sector and civil society.

### **4.3 Insights from Collaborative Projects with International Organizations**

Kosovo has benefited significantly from collaborations with international organizations, which have provided technical expertise, funding for various e-government projects and capacity building for the civil servants. The collaboration with the Estonian e-Governance Academy has been crucial in implementing Kosovo's e-government strategy, particularly in integrating cybersecurity measures. Estonia's successful digital governance model serves as a blueprint for Kosovo, ensuring that digital transformation efforts are secure and efficient (EGA, 2021).

Furthermore, The Multi-Donor Action by the EU and BMZ supports Kosovo in reducing administrative burdens and promoting digital approaches for better service delivery. The project focuses on improving coordination, deregulating processes, and enhancing the use of digital tools to streamline services for businesses and citizens (GIZ, 2023). This collaborative effort not only improves the efficiency of public administration. Additionally, Kosovo's involvement in the Open Government Partnership (OGP) emphasizes its commitment to transparency, accountability, and citizen participation. The OGP framework provides a

platform for Kosovo to share best practices and learn from other member countries, thereby enhancing its digital governance initiatives (OGP, 2023).

Kosovo's Chief Technology Officer also reaffirms how these collaborative projects have introduced best practices and innovative solutions to Kosovo's public administration. For instance, he mentions the concept of open data by design, implemented as part of the e-government strategy. During the interview conducted with him, he continuously reflects on the international best practices in data transparency and governance, mentioning how by adopting these practices, Kosovo aims to create a more open and accountable government that better serves its citizens (CTO, 2023).

Moreover, international collaborations have historically played an incredible role in advancing Kosovo in different fields. The involvement of international organizations such as the World Bank, UNDP, GIZ and USAID has also provided crucial funding and technical support for various e-government projects. These partnerships have enabled Kosovo to implement advanced digital solutions and improve public service delivery, demonstrating the significant impact of international cooperation on the country's digital transformation efforts.

Kosovo has shown a significant commitment to digital governance, as seen by its collaborative projects and e-government efforts. It has achieved visible progress in internet penetration, enhancing accountability and openness in public administration leveraging the support from global partners and use of the provided digital solutions.

The government's holistic approach to the digital transformation journey ensures that efforts related to digital transformation are safe, inclusive, and meet the needs of its people, while also encouraging increased public participation. Despite the substantial progress achieved in Kosovo's digital governance through various international aid projects, concerns remain about the sustainability of these initiatives post-project completion.

Kosovo's considerable dependence on development aid raises the risk that these efforts may stagnate without ongoing external support. Projects funded by organizations such as the World Bank, GIZ, and UNDP have been pivotal in advancing digital transformation; however, the initiatives might not continue to evolve and improve independently once the aid ceases. It is crucial for Kosovo to develop local capacities, secure sustainable funding, and foster a culture of innovation within its government institutions. Without these measures, there is a genuine risk that the advancements made could halt, compromising the long-term benefits intended for the country's digital future.



## 5. Impact Assessment

### 5.1 Impact of Digital Governance on Municipal Level – Kosovo’s Capital

Digital governance initiatives have significantly reshaped local administration and service delivery in Pristina, the capital city of Kosovo. As the primary administrative and economic hub, Pristina has been at the forefront of adopting e-governance solutions aimed at enhancing efficiency, transparency, and citizen engagement. This section evaluates the implementation of these initiatives, their impact on local governance, and the challenges encountered.

Local authorities stand on the brink of a significant transformation, partly driven by harnessing digital tools and processes to enhance their capacities. The potential for digitalization driven and enabled by local governments is immense. It can spur economic growth, transparency, improved governance efficiency, and environmental sustainability. Technologies like the Internet of Things (IoT), Artificial Intelligence (AI), Blockchain, and Digital Twins are at the forefront of this revolution. They offer smart and sustainable urban systems, enhance governance, and facilitate inclusive service delivery (ICLEI, 2022).

According to the digitalisation advisor to the mayor of Pristina, the Municipality of Pristina manages its digitization initiatives independently, though it collaborates with the central government, particularly with the Agency for Information Society. These collaborations are crucial when integrating additional services into e-Kosova that involve municipalities, such as the e-Municipality project. Despite these connections, the Municipality operates with its own budget and has the flexibility to initiate and implement digitization projects without waiting for central government directives (Municipality of Pristina, 2024).

One of the foundational initiatives is the e-Pristina portal, a comprehensive online platform that offers various municipal services to residents. This platform enables citizens to access services such as applying for permits, paying taxes, and accessing public records without needing to visit municipal offices in person (Government of Kosovo, 2023). Additionally, the Municipality conveys that it utilizes the platform [prishtinaonline.com](https://prishtinaonline.com), which allows citizens to submit complaints, requests, or comments. However, according to Pristina Municipality, the integration of feedback into policy design is currently limited, yet it is being considered for implementation in future projects (Municipality of Pristina, 2024).

Furthermore, the introduction of a Geographic Information System (GIS) is another component of Pristina's digital governance strategy. According to the Mayor’s Digitalisation

Advisor, the GIS platform allows for the mapping and management of municipal resources, including infrastructure, land use, and public services, providing municipal planners and decision-makers with accurate and up-to-date information for better planning and resource allocation, while also offering citizens tools to explore local amenities, plan travel routes, and understand zoning regulations. The Municipality's strategy also consists of including the e-Permit system for building permits, Waste Management systems, and infrastructure for Smart City and IoT initiatives. These efforts aim to enhance transparency, mirroring similar initiatives at the central government level (Municipality of Pristina, 2024).

One of the most noticeable improvements has been in the efficiency of service delivery. By moving services online, according to the Municipality, the time required to process applications and respond to citizen inquiries has been reduced. For example, the time taken to issue building permits has been reduced from several weeks to a few days, thanks to the streamlined processes facilitated by the e-Pristina portal (Government of Kosovo, 2023).

Moreover, the digitization of records has minimized the risk of data loss and improved the accuracy of municipal records. Employees no longer need to sift through piles of paperwork to find information, and the digital database allows for quick searches and retrievals. This efficiency gain has freed up municipal staff to focus on more strategic tasks rather than routine administrative work.

With more information available online, citizens have greater visibility into municipal operations and decision-making processes. The open-data, both locally and globally, results with trust between the Municipality and its residents, as they can easily access information about municipal budgets, project plans, and council meetings (Schachtner, 2023). The digital transformation has also had a positive impact on economic development in Pristina. According to the Mayor's cabinet, by simplifying administrative procedures and making it easier for businesses to comply with regulations, the Municipality has created a more conducive environment for investment and entrepreneurship. The streamlined processes and increased transparency have reduced the administrative burden on businesses, encouraging more enterprises to set up operations in Pristina.

Nevertheless, despite the significant progress made, the implementation of digital governance initiatives in Pristina has not been without challenges, of course. Major challenges include budget constraints, lack of advance planning for digitization, and insufficient internal professional resources. Additionally, there are often contradictions between central and local government projects and long-term strategies. To address these challenges and leverage new opportunities for enhancing local e-government services, the Municipality is working on



several ongoing and future projects, as well. These include the Smart Parking and Smart City Infrastructure project, implemented in cooperation with 'Prishtina Parking', which includes sensor-equipped parking lots, citizen notifications, and Smart City communication infrastructure.

Another key initiative is the Digitization and Transcription with AI for Municipal Assembly and Mayor's Cabinet project, aimed at increasing efficiency and transparency through digital transcription and task management systems (Municipality of Pristina, 2024). Additionally, through a public-private partnership, the Municipality is developing a Digital Wallet that will enable payments for bus services and all other municipal services, enhancing convenience and accessibility for residents.

The Municipality is also working on the upgrade of the Waste Management System to enhance transparency, including citizen profiles and reporting capabilities. There is a reorganization of digital transformation in collaboration with UNDP to involve international experts based on project models. Additionally, there are projects for the digitization of educational content, mobility analysis through big data, and providing students with educational tablets. The e-Permit Project, already implemented, enables digital permit applications and transparent monitoring. Finally, the Smart Lighting Project aims to modernize street lighting with IoT and energy-saving technologies (Municipality of Pristina, 2024).

In conclusion, the impact of digital governance initiatives on local municipalities in Kosovo, particularly in Pristina, has been transformative. These initiatives have improved administrative efficiency, enhanced service delivery, and fostered greater transparency and citizen engagement. While challenges remain, the Municipality's commitment to digital innovation promises continued progress and improvements in the quality of life for its residents.

## **5.2 Digital Transformation and Economic Development**

Kosovo's journey towards economic growth is significantly influenced by its embrace of technology and innovation, and also, one of the primary objectives of the 2020 Europe strategy is to improve the sustainability and growth-friendliness of public finances. Hence, one of the main economic effects of e-government adoption is cost reduction and budget savings. The e-Government Strategy 2023-2027 outlines a clear path for Kosovo to become a modern economy by 2030, focusing on integrating technology into public services to drive broader economic benefits.

The new nation's vibrant tech startup ecosystem and the presence of established enterprises provide numerous opportunities for public-private partnerships (PPPs). Many local tech companies are already involved in developing software and providing technical assistance to the government. This collaboration between the public and private sectors can accelerate the modernization of public services, making them more efficient and accessible.

The private sector and digital economy are essential to the economic development of any nation, including Kosovo. Today's business practices are vastly different from those before the turn of the millennium. The digital economy offers unprecedented opportunities, transforming economies, markets, and the interactions between organizations, suppliers, and customers. It has become a key driver of growth, innovation, and job creation. Additionally, social networks and online platforms have become integral to the digital economy, further enhancing its importance. For Kosovo, the digital economy holds great promise for driving economic progress (Webalkans, 2023).

From an institutional point of view, the Ministry of Economy has been rather crucial in visibly pushing in promoting the public-private partnerships. On May 2024, the Ministry held an informative session about the "Digital Europe" Program. This EU initiative aims to support technological advancements, infrastructure, and cybersecurity through financial and technical aid (Rizvanolli, 2024).

The Ministry is dedicated in creating a supportive environment for the ICT sector, aiming to make Kosovo a leading tech economy by 2030. She cited the Emerging Europe's Future of IT report, which ranks Kosovo highly for its talent pool, infrastructure, and competitiveness, where over 70% of Kosovo's ICT companies export their services, underscoring the country's appeal as a global IT hub.

Country	TOTAL FOR IT INFRASTRUCTURE	IT Infrastructure		
		Connectivity	Digital transformation	Non-personnel resources
Romania	14.55	9.93	3.64	0.98
Kosovo	12.98	5.79	5.24	1.95
Estonia	12.74	2.95	6.79	3.00
Hungary	12.44	7.32	3.77	1.35
Lithuania	12.16	6.16	4.20	1.81
Latvia	12.06	6.05	5.06	0.94
Poland	11.89	6.47	4.32	1.10
Bulgaria	11.70	6.10	3.76	1.84
Moldova	11.55	8.16	2.92	0.47
Serbia	11.24	5.70	4.96	0.59
Ukraine	11.07	6.57	3.93	0.58
Czechia	10.14	4.22	3.46	2.46
Slovakia	10.03	5.39	3.52	1.12
Slovenia	9.94	2.85	5.23	1.87
Croatia	9.76	4.23	4.52	1.01
Albania	9.62	4.76	4.54	0.32
Belarus	9.30	6.35	2.42	0.53
North Macedonia	8.52	4.23	3.96	0.32
Armenia	8.46	4.77	3.38	0.31
Azerbaijan	7.84	4.98	2.56	0.30
Georgia	7.72	4.71	2.61	0.40
Montenegro	7.24	4.52	2.40	0.32
Bosnia and Herzegovina	6.22	3.80	2.03	0.39

Country	TOTAL FOR ECONOMIC IMPACT	Economic Impact		
		Economic performance	Cost competitiveness	Covid Resistance
Estonia	13.95	7.84	3.36	2.74
Montenegro	12.85	4.64	5.95	2.26
Georgia	12.70	4.89	5.30	2.51
Azerbaijan	11.88	2.60	5.28	4.00
Kosovo	11.73	3.34	6.74	1.65
Bosnia and Herzegovina	11.09	3.13	5.20	2.76
Ukraine	10.86	5.42	3.20	2.24
North Macedonia	10.50	4.03	3.44	3.02
Belarus	10.47	6.07	3.08	1.32
Bulgaria	10.36	5.54	3.39	1.43
Albania	9.92	3.16	5.04	1.72
Lithuania	9.79	4.29	2.12	3.39
Czechia	9.61	4.43	4.11	1.06
Moldova	9.47	4.67	2.75	2.05
Croatia	9.33	4.39	4.54	0.40
Slovenia	9.28	3.47	4.11	1.70
Serbia	9.22	4.23	2.94	2.05
Latvia	9.20	3.74	3.84	1.62
Poland	9.00	3.60	4.32	1.09
Romania	8.69	4.88	3.16	0.65
Slovakia	8.53	2.44	4.78	1.31
Hungary	8.30	2.88	4.48	0.93
Armenia	6.92	3.00	3.10	0.81

Figure 5: IT Infrastructure and Economic Impact in Selected Countries. Adapted from Emerging Europe. (2023). Future of IT Report 2023.

Furthermore, innovation hubs like the Innovation and Training Park (ITP) in Prizren and the Innovation Centre Kosovo (ICK) are key drivers of this technological progress. These hubs provide ongoing training for young people in tech skills, ensuring a skilled workforce ready to support government initiatives. The interconnected approach between different sectors not only creates better jobs and incomes but also enhances practical knowledge and skills. Moreover, supported by GIZ Kosovo, ICK runs programs that back innovative ideas for public services, aligning with the goals of the Stabilization and Association Agreement (SAA) between Kosovo and the EU, aiming to enhance public services for citizens and businesses alike.

Additionally, the World Bank's Digital Economy (KODE) Project for Kosovo is an added value in this transformation path. The project's objective is to improve access to better quality and high-speed broadband services in project areas and to online knowledge sources, services, and labor markets among citizens, and public and academic institutions (World Bank, 2024). Initiatives aimed at enhancing the digital capabilities of private enterprises are essential for economic growth. These initiatives help businesses adopt new technologies, improve operational efficiencies, and expand into new markets, thereby contributing significantly to the country's GDP and employment rates.

By embracing these new technologies, the country will have an improved resource allocation, as well as enhanced regional efficiency. More so, by digitizing public services, the government can streamline operations, reduce bureaucratic hurdles, and deliver services more efficiently, resulting in significant cost savings and productivity boosts across sectors (Kosovo Digital Agenda, 2023). By fostering innovation and encouraging PPPs, the combined efforts of the government, private sector, academia, and civil society are crucial in driving economic growth and improving public services.

### **5.3 Influence of Digital Diplomacy on Kosovo's Digital Governance**

Digital diplomacy, also known as e-diplomacy or cyber diplomacy, leverages digital technologies to achieve diplomatic objectives and enhance international relations. According to Bjola (2016), digital diplomacy has transformed how states interact on the global stage, enabling more direct and efficient communication channels. And for Kosovo, a rather new country who is continuously seeking international recognition and integration into global institutions, digital diplomacy plays a massive role in shaping its governance. This part of the research analyses how Kosovo uses digital diplomacy to influence e-governance and foster citizen participation, especially in diaspora.

Digital diplomacy plays an important role in Kosovo's pursuit of international recognition. Through social media, websites, and digital campaigns, Kosovo communicates its political, economic, and social developments to a global audience, bypassing traditional diplomatic channels. The eDiaspora platform, for instance, connects the Kosovar diaspora with national projects and keeps them informed about diplomatic efforts (Ministry of Foreign Affairs and Diaspora, 2023). Additionally, through digital channels, the country also tries to foster bilateral relations, particularly with technologically advanced countries like Estonia.

Another Ministry of Foreign Affairs and Diaspora initiative that is already launching its second cohort this year, is the Citizen Diplomacy Fellowship Program, a program which invites young professionals from the diaspora to contribute to Kosovo's public sector, enhancing its digital transformation (Ministry of Foreign Affairs and Diaspora, 2023). Additionally, a number of well-known international organisations and development agencies, including the World Bank, USAID, UNDP, and GIZ, are important allies in Kosovo's digital transformation effort. They consistently use success stories to highlight Kosovo, which increases the country's visibility on social media. Furthermore, Kosovo's diaspora is a useful tool for its digital diplomacy approach. Therefore, the government's digital platforms are a very

useful way to interact with the diaspora and invite them to support national interests and economic progress. In order to integrate diaspora residents into Kosovo's digital governance system, the School for Diaspora Diplomacy provides them with instruction in diplomatic techniques and international relations (Ministry of Foreign Affairs and Diaspora, 2023).

Apart from digital diplomacy being an incredibly important tool for strengthening the country's international subjectivity, another key benefit of e-diplomacy is the promotion of transparency and accountability in governance, too. By leveraging these digital tools, Kosovo can enhance the visibility of its diplomatic activities and governmental operations, and through online platforms it can also regularly publish information on international agreements, foreign aid utilization, and progress on diplomatic initiatives, empowering citizens to participate in decision-making processes.

Digital diplomacy offers Kosovo a dynamic and innovative approach to statecraft, enabling it to navigate the complexities of the global terrain of the twenty-first century while addressing current diplomatic issues. The ongoing lack of recognition from some European countries and the prolonged dialogue facilitated by the EU underscore the urgency for Kosovo to fully leverage digital diplomacy. This approach includes using social media for public outreach, holding virtual diplomatic encounters, and employing technology for crisis management, thereby enhancing international engagement and promoting transparency and accountability in governance.

Even though digital diplomacy presents challenges, such as misinformation and digital divide issues, its benefits significantly outweigh these obstacles. It is crucial for shaping Kosovo's digital governance by enhancing international recognition, fostering cooperation, mobilizing the diaspora, and promoting transparency. Initiatives like the 'eDiaspora' platform, the CD Fellowship Program, and the School for Diaspora Diplomacy demonstrate how digital diplomacy can integrate the diaspora into national development. As Kosovo continues to navigate digital transformation, digital diplomacy will remain a key tool for achieving its governance and developmental goals.

## **6. Conclusions**

The digital transformation of societies is not merely a technological evolution but also a tectonic shift that affects governance, economic activities, and social interactions. In examining the digital transformation of Kosovo, the core of this research has focused on the importance of citizen participation. Additionally, the research underscores the necessity of a

holistic approach involving all societal sectors to foster an inclusive, efficient, and sustainable digital landscape.

Citizen participation is the backbone for the success of digital transformation efforts. For digital initiatives to be effective and widely accepted, they must resonate with the needs and expectations of the people. This requires engagement in a form that it facilitates active involvement from citizens, ensuring that their voices are heard, and their needs addressed. In Kosovo, as in many other regions, the participation of citizens can drive transparency, accountability, and responsiveness in digital governance.

The concept of the *quadruple helix* model—comprising the government, the private sector, civil society, and academia—is key for the digital transformation. Each helix plays a unique role: the government creates a policy environment, the private sector drives technological innovation, civil society ensures inclusivity and equity, and academia provides research and development. In Kosovo, there is a noticeable gap in academic research, which the government needs to address by fostering closer collaborations with academic institutions and supporting research initiatives.

Kosovo's path to digital transformation is also intertwined with its aspirations for EU accession. Therefore, it is crucial that the country's legislative frameworks and e-government strategies align with the EU AI Act and GDPR. Compliance with these regulations will not only facilitate smoother integration into the EU but also enhance the trust and security of digital services within Kosovo.

Furthermore, international support remains vital for Kosovo's digital transformation, considering that it is still a country in transition. Development agencies and international organizations play a massive role, yet their support should be designed with sustainability in mind. Hence, an exit strategy is most necessary to ensure that the government does not become overly dependent on donor aid. Coordinated efforts are needed to avoid overlap and ensure comprehensive coverage of all digitalization aspects. Moreover, continued collaboration with countries like Estonia, which are pioneers in digital governance, can provide valuable lessons and best practices.

Digital diplomacy and the digital economy are also critical components of Kosovo's digital transformation. Engaging in digital diplomacy can help Kosovo build international partnerships, attract foreign investments, and participate in global digital initiatives. Simultaneously, developing a strong digital economy will create new economic opportunities, drive innovation, and improve the overall quality of life for citizens. Additionally, the Kosovo government should invest in e-voting infrastructure to facilitate electoral participation among

its extensive diaspora, ensuring that citizens living abroad can easily and securely exercise their voting rights.

Effective digital transformation requires active citizen engagement. The government should implement initiatives that facilitate greater citizen participation, such as digital literacy programs, additional public consultations on digital policies, and platforms for civic engagement. Increased collaboration with the private sector can drive innovation and service delivery in the digital realm. Public-private partnerships should be structured to align private sector incentives with public goals, ensuring that digital solutions are both effective and widely accessible.

In conclusion, the digital transformation in Kosovo stands at a crossroads, with significant progress made yet substantial challenges remaining. Kosovo can keep creating the effective digital ecosystem it is trying to create by ensuring that the quadruple-helix is both functional and feasible. The key to this transformation lies in sustainable, inclusive, and well-coordinated efforts that prioritize citizen participation and leverage international best practices. But it also stems from the idea that the citizen should be able to understand and navigate the entire procedure with ease. A successful digital service should have many features, but it should be mainly **easy to find** and **easy to use**.

Poor service design not only results in significant financial losses for governments, it also makes citizens lose trust in the process. Therefore, it is crucial to involve citizens in policy-making and service design discussions, as they know best what works for them and what doesn't. The primary takeaway from this research is that governments should focus on measuring the long-term outcomes they aim to achieve, rather than merely the tasks they intend to complete. By doing so, they can ensure that the digital transformation efforts are truly what they need to be: *beneficial* and *sustainable*.



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