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DIGITAL DEMOCRACY IN EUROPE: SERVICE DESIGN FACILITATING E-  
PARTICIPATION PLATFORMS

MA Thesis

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## **Authorship Declaration**

I have prepared this thesis independently. All the views of other authors, as well as data from literary sources and elsewhere, have been cited.

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## **Abstract**

This study investigates the impact of service design on citizen engagement in e-participation platforms within the context of digital democracy in Europe. With technological advancements significantly altering political processes and democratic engagement, this thesis explores how service design can facilitate citizen participation on digital platforms. The research encompasses a comparative analysis of eight e-participation platforms across Estonia, Latvia, Ukraine, Iceland, France, Scotland, and Ireland. Using a mixed-methods approach, including manual qualitative platform analysis, reports review, and expert surveys, the study identifies key factors in service design influencing user engagement and satisfaction. Findings highlight the importance of user-friendly interfaces, accessibility features, and robust feedback mechanisms in enhancing platform effectiveness. The study provides recommendations for optimizing service design to improve citizen engagement and support democratic processes, ultimately contributing to the development of more effective e-participation platforms in Europe.

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## **I. Introduction**

Technological innovations over the past thirty years have led to rapid changes in many processes related to the political sphere of human life and the manifestations of democracy. In response to the development of the Internet, the prevalence of social media and other online communication platforms, a logical consequence for democratic countries has been the expansion of opportunities for civic participation and interaction with the government through modern Internet technologies. The Internet and social media have become powerful tools for mass communication, leading to the rapid exchange of information, ideas and views on political issues, resulting in the active organization of actions and movements around a common public opinion. In response, governments have begun collecting data and analysing public opinion to better respond to the needs of citizens.

Most democratic participation processes are being optimized and simplified through digitalization. Previously, the primary expression of public sentiment involved grassroots movements rallying in the streets to voice their grievances to authorities, however, today, there are a multitude of avenues, including digital platforms, through which citizens can convey their demands, offering efficiency and convenience in the process.

One of the many manifestations of democracy is the active use of public participation services. Digital platforms for public participation allow citizens to engage in decision-making by giving them the opportunity to express their suggestions and opinions on issues that concern them and require change, which contributes to the development of democracy. In order to achieve the three key functions of e-participation - monitoring, agenda-setting, and participation in decision-making (Hennen et al., 2020) - digital democracy is implemented through various tools on services, including: submitting proposals and voting for proposals from other citizens, participating in discussion forums, participatory budgeting, and others.

Although such services are gaining popularity in democratic countries, there are doubts about the effectiveness of these tools for democracy in general. There are a number of caveats that affect the implementation of platforms - many citizens do not use them for a number of factors, such as lack of digital literacy among certain demographic groups, complexity of platforms, distrust of technology and institutions. Other issues include data security, different political and regulatory environments, and cybersecurity delineations and risks. In general, there is a problem of declining democracy, in particular, the Economist Intelligence Unit report found

that out of 167 countries surveyed, 116 recorded a decline in the overall Democracy Index in recent years compared to 2019. (Economist Intelligence Unit, 2020) These problems need to be addressed at many levels and require the involvement of economic, political, and social experts.

*The purpose of this study is to investigate the impact of service design on the involvement of citizens in active participation and the use of such civic participation platforms.* According to statistics, only a third of consumers say that their experience of visiting a government website is easy (TransUnion, 2022), so activists continue to use other methods of putting pressure on the government.

By focusing on the design and functionality of these platforms, there are ways to make them more accessible, user-friendly, and appealing to different segments of the population, including those who may be vulnerable due to limited access to resources. In the long run, improving the interface and navigation can make it easier for people with different levels of technical literacy to use the platform. In addition, optimizing the design, improving feedback mechanisms and ensuring transparency can help to increase trust in civic participation platforms and reduce corruption.

In order to address the shortcomings of e-participation tools that may be related to their design and functionality, it is aimed to explore how improving their design and functionality can enhance their performance and citizen engagement. Strengthening the service design and functionality of these platforms can help to engage a wider range of citizens in active participation in political processes and promote democracy in society.

In the context of this study, e-participation platforms are online platforms designed to promote active involvement of citizens in decision-making processes and participation in civic activities, which provide for various opportunities for citizens to receive information about political and social events, discuss and express their views, participate in voting, debates, sign petitions, formulate proposals for the allocation of the state budget and other forms of interaction with the authorities and other participants in the civil society (Simonofski et al., 2021; Berntzen & Johannessen, 2016; Schossboeck et al., 2016).

Thus, social media, through which citizens can also often express their opinions, are not included and considered as objects of research, in particular, due to less structured format of such discussions, the high risk of bot interference, and others. The study focuses on platforms

whose direct purpose is to enable citizens to exercise their rights. The study also focuses on European countries that are democratic.

The methodology involves a comparative case study of eight national e-participation platforms across seven European countries: Estonia, Latvia, Ukraine, Iceland, France, Scotland, and Ireland. These cases were chosen to explore the diverse conditions under which these platforms operate and develop. The study includes Osale.ee and Rahvaalgatus.ee from Estonia, Better Iceland and Scottish Parliament using the flexible platform Your Priorities in different political and cultural contexts, ManaBalss.lv and Miiivybir.org with the same design but different outcomes, and NI Direct and Le Grand Débat National, developed by private companies Delib and Cap Collectif, respectively. Case selection will be described in more detail in the following sections.

For this study, the service design of e-participation platforms is considered, which involves a comprehensive assessment of the technical aspects of the platform, user experience and engagement. Such an analysis will help to understand how platforms are structured and function, as well as how they can be optimized.

The aim is to conduct a study to examine the process of developing and operating e-participation platforms in different contexts, both the use of different platforms in one country and the use of one platform or similar platforms in different countries. The study focuses on the following aspects: *political and procedural* (what stages does the procedure for using platforms consist of, the service organization, how much the state is involved in this process) and *technical* (is the platform easy and convenient to use, what functionality does it contain). Examining these aspects through a literature review, platform analysis, and interviews with experts involved in platform development in different contexts will help determine how service design contributes to a high level of citizen engagement with e-participation platforms in relation to other factors.

The study has the potential to provide recommendations on key success points in service design for the further development of e-participation platforms for citizen engagement and political decision-making in the digital age, which will contribute to the further development of democracy and governance in Europe.

This study is organized into four sections. The first section presents the literature review, which discusses the terms and concepts of digital democracy and e-participation platforms, and

reviews previous studies with a focus on analysing the factors that influence citizen engagement in e-participation platforms. Section 2 on methodology sets out the research questions and hypotheses, describes the research design, the criteria for selecting platforms and countries, and the methods of data collection. Section 3 provides a detailed analysis of the selected platforms, including a comparative analysis of the main characteristics and effectiveness of each platform. Section 4 analyses the collected data, establishes correlations between service design elements and citizen engagement, and identifies best practices and challenges. The conclusion summarizes the key aspects of service design that have an impact on citizen engagement and provides recommendations for improving e-participation platforms.

## II. Literature Review

- **Conceptualization: digital democracy and citizen engagement**

In the field of digital democracy and e-participation platforms, different terms are used to capture the essence of the subject. For example, Congge et al. (2023) emphasize that digital democracy is based on three key characteristics and concepts in the field: democracy, internet, and movement. Scholars most often define digital democracy as the integration of digital technologies with democratic processes to enhance participation, transparency, and engagement in governance (Diirr et al., 2009; Parycek et al., 2017).

Researchers also frequently refer to the broader category of "electronic or e-democracy" (Schaal 2016) or the more specific term "digital democracy" (Hague and Loader 1999; Hacker and van Dijk 2000a). Some have proposed the term "e-democracy" as a synonym for "digital democracy", while others have rejected it because of its generality, emphasizing "the use of information and communication technologies (ICTs) and computer-mediated communication (CMC)" on various media platforms (Hacker and van Dijk 2000b: 1). These studies emphasize the role of information and communication technologies (ICTs) in transforming democratic practices by providing new platforms for public engagement and decision-making (Diirr et al., 2009; Parycek et al., 2017). In this study, the term "digital democracy" will be used in a narrower sense, when it comes to targeted digital platforms that are designed specifically to increase the influence of citizens on governmental changes and processes.

There is also a variety of nomenclature within digital democracy, including terms such as "civic technologies," "open government," or "e-democracy." (What Is the State of Debate on Digital Democracy?, n.d.) Despite these differences, a common feature of all initiatives is the creation of new channels of communication between citizens and government through technology.

However, the literature recognizes a relevant distinction between "minimalist" and "maximalist" definitions of digital democracy. Minimalist approaches focus on providing citizens with better access to government information and online services, while maximalist perspectives prioritize active citizen participation in decision-making processes (Simon et al., 2017). This study follows the maximalist approach and aims to explore innovative practices that contribute to the creation of a holistic ecosystem of online and offline democratic innovations. An example of such a maximalist approach is Nathan Gardels' promotion of hybrid democracy, which includes practices such as online participation in the legislative

process, interactive civic software, citizen assemblies, political juries, and deliberative polling (Institute, 2021).

It is very important to consider digital democracy as a means of supporting and strengthening democracy, democratic institutions and processes through the development of information technology. The main goal is to strengthen democracy, recognizing digital democracy as one of several strategies that complement and interconnect with traditional democratic processes (Council of Europe 2009: 11). Understanding the concept and research on digital democracy in general is important because it helps to clarify how digital innovations affect the way decisions are made in democratic systems and how they can engage citizens in politics, thereby reducing distrust in political processes and democracy.

Taylor (2013) emphasizes the potential of digital tools, as manifested in e-democracy, to enhance public accountability and political discourse. This highlights the potential of digital democracy to change the relationship between citizens and political structures through digital platforms that offer new forms of engagement and participation (Berg & Hofmann, 2021). But attention is also drawn to gaps, for example, Dijk (2012) emphasizes the difficulty in understanding how digital tools can be effectively integrated into familiar political structures, which also raises doubts about the long-term sustainability and impact of digital democracy initiatives. John Gastil, who sees the process of state activity as a "democratic machine" (Gastil & Richards, 2016), emphasizes the importance of creating long-term feedback loops between government officials and citizens, suggesting that many online participation systems lack effective two-way interaction, which contributes to the disconnection of public spaces.

Digital democracy is implemented by highlighting the polarization of public opinion (Congge 2023), which can be seen in one place - on an electronic platform for citizen engagement. And one of the indicators that is important for this study is the direct involvement of citizens.

In the 2008 UN report "People Matter: Civic Engagement in Public Governance" defines that citizen engagement "is regarded as an important governance norm that can strengthen the decision-making arrangements of the state and produce outcomes that favor the poor and the disadvantaged." (Gaventa & Barrett, 2012; World Public Sector Report 2008, 2008). This has a favorable and decisive impact on the development of democracy in the country.

According to Boukhris et al. (2016), citizen engagement can be defined as an interactive process between different categories, not only between citizens and government officials, but

also between citizens themselves. If observing citizen engagement in the context of electronic platforms, the main goal is to increase citizen input, engage citizens in public policy making, and encourage people to be part of the outcomes that will have an impact (Duarte Ferreira & Ritta Coelho, 2022; Macintosh, 2004; Medaglia, 2012). To summarize, citizen engagement can be conceptualized as a governance norm that adds interactivity to the decision-making mechanism in the state in order to increase the contribution of citizens to socially important issues.

- **Review of existing researches on citizen engagement in digital democracy platforms**

The rapid development of technology has had a major impact not only on the development of democracy and the evolution of mechanisms for citizen engagement but has also accelerated national and international responses to growing crises and challenges in various fields. Due to its comprehensive approach to problem-solving, it has also had an impact on the development of science, the speed and ease of dissemination of knowledge and information, which has contributed to the fact that each technological revolutionary change has become the subject of research and detailed discussion in wide circles. Research and analyses in the modern technological age can be replaced and improved just as quickly and remain sustainable and long-lasting or lose their relevance due to rapidly changing contexts and conditions. Therefore, it is first and foremost important to consider theoretical issues, overviews, and a comprehensive approach to the challenges associated with the introduction of technologies to engage citizens in the democratic process.

The study of digital democracy in Europe, in particular, the mechanisms through which it is implemented, among which e-participation platforms are central, is an emerging field that focuses on addressing theoretical issues and challenges related to technology in democratic processes. Previous studies have been quite comprehensive, in general, and each addresses different facets of the issue, recognizing the complex layers involved.

Reflections on modern democracy undoubtedly emphasize the need for innovation in democratic governance in order to change the approach from a client relationship between the state and citizens to a partnership. It is necessary to recognize the widespread access to the Internet, which, although it does not yet cover the entire planet for economic and social reasons, as well as certain limitations of this tool in authoritarian states, the development of the global

system of interconnected computer networks is now organic and unstoppable. This growth and use must be meaningful and controlled.

The research reveals many enthusiasts who believe that new technologies can be used to develop democracy. They are determined to provide citizens with many opportunities and powers to influence important issues in the development of the state. For example, the former Prime Minister of Greece, the country that is the birthplace of democracy as a phenomenon, George Papandreou, proposed the formation of a "fourth branch of government" along with the three established ones, which would be dominated by citizens and made through electronic deliberation. (Papandreou, 2019) This would give important legitimacy to various electronic civic participation platforms and increase citizen satisfaction with the democratic process. The principles and views of scholar Philip Petty are similar, as he insists in his concept on strengthening the goal of popular sovereignty, which he sees directly in the control of citizens over the government, emphasizing that the instruments of democracy should operate far beyond the ballot box, and therefore not be limited to the right to vote, and promote inclusive democracy in which all citizens participate (Institute, 2021).

The institutional changes in Italy related to the creation of the Ministry of Direct Democracy in 2018 are also a noteworthy example. (Institute, 2021) This initiative allows citizens to directly initiate measures that can become laws without the intervention of parliament. This is an example of promoting an enabling infrastructure for people's participation in politics and recognizing the importance of their involvement. (Correspondent, 2018)

However, there are many factors that generate skepticism and thus try to stop the expansion of democracy practices by warning against technology. Scholars emphasize the potential risks and drawbacks of using technology in democracy, emphasizing the need for careful consideration of these aspects. Many objections are based on such levers as the rapid development of modern technologies, such as artificial intelligence, which makes it necessary to be cautious with all products in digital politics due to the high risk of cyber security and propaganda. There are also different opinions on the effectiveness of innovation in digital democracy, with a focus on corruption and excessive power (What Is the State of Debate on Digital Democracy?, n.d.).

Some traditionalists argue that citizen participation may be symbolic and not have a meaningful impact due to certain barriers, such as lack of time, education, and motivation of citizens to use

e-participation platforms and initiate change. The concept of applying collective intelligence calls for "cool and sober reflection" in the digital age, contrasting the fast-paced approach of digital disruptors with a deliberate and conscious consumption-oriented approach to 21st century democracy (Institute, 2021).

While recognizing the desire for citizen engagement, the challenge is to make citizens feel that their opinions matter. E-democracy is seen as a potential solution to this, but at the same time requires strengthening, increased transparency, accountability mechanisms and innovative online tools to actively engage citizens in decision-making processes (Kneuer, 2016). If these goals are achieved, citizen engagement will have a number of benefits that scholars emphasize, including understanding of societal needs and problems, developing citizens' understanding of their actions and autonomy in responding to crises, which leads to increased civic engagement, and improved capacity to respond to crises (Zhu et al., 2022). An important consequence is the building of trust between citizens and government representatives. In general, such participation affects the quality of government decisions, empowers citizens, and increases their satisfaction (Kim & Lee, 2012; Margetts & Dunleavy, 2013; Müller, 2022). Researchers confirm that "citizen participation and engagement are therefore important to legitimize governments and their institutions, whose existence is primarily to serve the interests of their citizens" (Duarte Ferreira & Ritta Coelho, 2022; Manda & Backhouse, 2019).

It should be emphasized that in the early stages of e-participation development, projects were aimed at integrating a large number of users, but later began to pay more attention to inclusive design and quality of contributions rather than mass participation (Schossboeck et al., 2016).

- **Understanding service design in the context of e-participation platforms**

Encouraging citizens to actively participate in public policy making is influenced by many factors, including the level of democracy in general and indicators that show the level of activity of civil society and the reaction of government officials to public initiatives. The purpose of this study is to draw attention to the design of e-participation platform services as a mechanism for their implementation and achievement of the main goal. It is important how complicated, both technically and procedurally, the procedure for making changes through the platforms is, and whether they are user-friendly. Sanford and Rose (2007) identify the socio-technological design of the system as the main challenge in engaging users.

The rationale for the importance of this research is that the website in online participation is becoming a major, integral "element of the service and also the medium for deliberation." (Rose & Sæbø, 2010). And in order to fully comprehend and be able to moderate deliberative argumentation with technology, it is necessary to set aside a new field of research (Rose & Sæbø, 2010). This area of Human-Computer Interaction also investigates various approaches to guarantee optimal usability and user involvement with digital tools (Thiel et al., 2016). It involves studying the design of software, including its content and structure, that affects user behavior and encourages them to interact in a manner relevant to the research question.

In their studies, researchers often emphasize that "the design style of the discussion forum influences its outcomes, particularly deliberation form and style, and willingness to participate" (Aikens 1998; Carlitz and Gunn 2002).

Also, in practical terms, in countries such as England and Scotland, policy documents, together with specialized departments and groups, set specific requirements for the involvement of technology and service design companies to create new innovative approaches (Charlton et al., 2023). These approaches are aimed at increasing efficiency, improving user experience, and reducing errors and costs.

When working with concepts, it can be noted that there is no single term that would provide a comprehensive and complete understanding of what would be meant by service design for civic participation platforms. Scientists use "design thinking", which is "seen as a consolidated approach to innovation that can influence the processes and activities of organizations at several levels, namely, organizational, strategic, and operational" (Elsbach & Stigliani, 2018; Mariani et al., 2023). The trend of using human-centered design can be also seen, which is expressed by the user-centered design approach.

According to a number of scientific papers, the term "service design" is more often considered through a number of characteristics. (Saad-Sulonen et al., 2020) In particular, "service design determines the key elements of a service offering and consequently influences users' service experience and forms the basis for delivering valuable service outcomes, such as perceived service quality and user satisfaction." (Chan et al, 2020) For this study, it is proposed to use the conceptualization of service design of e-participation platforms, which involves a comprehensive assessment of the technical aspects of the platform and user experience at

successive stages of use. Such an analysis will help to understand how platforms are structured and function, as well as how they can be optimized.

In the area of e-participation platforms, the integration of service design is essential to facilitate active citizen engagement in public policy making. The complexity, both technical and procedural, of the platforms plays a crucial role in encouraging or discouraging citizen participation. User-friendliness is a key factor that can significantly affect the success of these platforms (Chan et al., 2021) . Therefore, the analysis should understand whether the design of different civic participation platforms successfully meets the needs of users.

The research question that should be addressed is *how does service design facilitate citizen engagement in e-participation platforms, thereby implementing digital democracy in European countries*. The importance of this research is that it can suggest recommendations for the further development of these platforms, shaping citizen engagement and influencing political decision-making in the digital age. Service design should not be one of the stages in the development of civic participation platforms, but a meaningful mechanism for encouraging citizen engagement. Thus, this study seeks to contribute to the understanding and promotion of democracy and governance in Europe.

- **Factors influencing citizen engagement on e-participation platforms**

The current landscape requires a comprehensive understanding of the use of new digital tools and innovative deliberative practices to overcome the trust deficit between governments and the public. The study focuses on finding the factors that will lead to an active transition from an ad hoc voting process every few years to a more permanent and active involvement of citizens in the decision-making process. The researchers recognize that success depends on numerous factors and conditions, such as method, purpose, type of participation, scope, number of participants, recruitment methods, facilitation, types of interaction, and decision-making methods (What Is the State of Debate on Digital Democracy?, n. d.). This emphasizes the multifaceted nature of the criteria that influence the success of digital democracy tools. Studying the factors that influence the involvement of citizens in e-participation platforms allows us to identify fundamental principles that expand opportunities for participation, provide for the creation of open platforms for public discussion, and ensure the accuracy and integrity of information. If there are tools and methods to strengthen democracy and the functioning of government, they should be researched and put into use.

Panopoulou and her colleagues, through a comprehensive survey of practitioners across Europe, identified several factors for e-participation success (Panopoulou et al. 2014). These factors, drawn from the e-government and e-participation literature as well as practitioners' experiences, include governance and planning, security and privacy, sustainability, bridging the digital divide, inclusiveness, meeting user needs and expectations, government or leadership support, technological advancement, best practices, a promotion plan, and value to citizens and organizations. Their proposed model integrates specific measures related to these success factors, providing a holistic understanding of what contributes to effective e-participation (Panopoulou et al. 2014: 204-205).

Furthermore, it is important that these factors contribute to the creation of trusted spaces where citizens can freely express their concerns and influence the political agenda. Trust has emerged as a crucial, but often latent, factor influencing the use of digital tools for political participation (Hennen et al., 2020). The level of trust plays a crucial role in the willingness of citizens to interact with e-participation platforms and make a meaningful contribution to public discourse. Therefore, in particular, should be paid attention to what elements, instructions, and sections of civil society platforms can increase the level of trust of users.

The quality of interaction is another important aspect that often comes up in online discussions. There are concerns about the response of governments to petitions, in particular, delays in official responses can lead to the loss of relevance of the issues discussed (Wright 2012, 2016). This underscores the need for effective and timely government engagement to maintain the relevance and effectiveness of e-participation initiatives. Van Dijk's (2012) assessment highlights some progress in providing better access to political and governmental information through digital tools, with the aim of sharing information between governments, citizens, public administrations, representatives, political organizations and civil society organizations. It can be concluded that this communication, which leads to realized results, should be visible on the platforms.

For a more in-depth study, the urgent task is to find factors, including those directly related to service design, that influence the encouragement of citizens to use digital age tools to strengthen their participation in governance processes. Service design defines the main components of a service offering and thus influences the user experience and creates the foundation for delivering valuable service outcomes such as perceived quality and user satisfaction (Beltagui, Candi and Riedel 2016; Li and Shang 2020; Wirtz and Kurtz 2016). This

design includes not only aesthetic aspects, but also the entire process of interaction between the customer and the service, from the first contact to the results. It aims to ensure convenience, efficiency, and user satisfaction at every stage. This approach helps to increase customer loyalty, improve their experience and ensure a positive impact on their overall satisfaction. The criticism extends to digital democracy experiments, where design flaws are identified as limiting public interest and weak incentives for participation.

However, existing models, such as the Technology Acceptance Model (TAM), often fail to identify design attributes that influence user perceptions (Venkatesh, Davis, & Morris, 2007; Venkatesh, Tong, & Xu, 2016). Therefore, there is an urgent need for research aimed at identifying and validating specific design characteristics that promote citizen engagement (Grimmelikhuijsen et al., 2017; Hasan & Wright, 2020).

The scientific literature indicates that new forms of digital engagement and governance can be effective in enhancing citizen participation (Rumbul, 2019). Citizens not only appreciate these initiatives but actively engage in them, but for these efforts to be successful, it is critical to ensure proper design and a strong commitment to fostering meaningful interaction between government and citizens. Prioritizing meaningful engagement implies actively seeking and incorporating citizen input into decision-making processes, as well as demonstrating a willingness to consider and act on feedback. To ensure effective and efficient online interaction for citizens, it is imperative to depict a closed feedback loop (Rumbul, 2019). This requires not only citizen input, but also a commitment that citizen input is not the end of the process.

Effective design encompasses the user interface, accessibility and simplicity of the platform, ensuring that citizens can easily navigate and participate in governance processes. A manifestation of this is the self-service capability inherent in e-government platforms, which should empower citizens by allowing them to access services independently, reducing inefficient face-to-face interactions between individual citizens and representatives of the relevant services (Meuter et al., 2000). Such autonomy not only increases convenience, but also affects perceptions of service quality and satisfaction (Berry, Seiders, & Grewal, 2002; Rowley, 2006), as it allows citizens to feel more in control and confident in the process of receiving services. Satisfied citizens who can get the services they need quickly and easily also become more active participants in government processes and contribute to improving the quality of decisions made by the relevant government agencies. However, there is a balance to be struck, as user assistance remains critical, especially for people who lack digital literacy,

which emphasizes the importance of accessibility and user support in service design (Duarte, Silva, & Ferreira, 2018; Khan & Khan, 2018).

Thus, it is worth identifying accessibility and user support as important design features because it ensures inclusion and equal opportunities for all users, regardless of their personal limitations or technical expertise. Adherence to the principles of accessibility ensures that e-government platforms are accessible to all citizens. Therefore, considering the needs of all users in the process of developing e-government interfaces and platforms is an important prerequisite for building a just and democratic society.

Privacy and security issues related to online interaction pose significant barriers to the adoption and use of e-government services (Featherman & Hajli, 2016; Hong & Thong, 2013). Addressing these issues is essential to build trust and encourage greater participation (Rust & Kannan, 2003). Therefore, in the design of an online platform for public administration, it is important to implement a set of measures aimed at ensuring the privacy and security of users. This includes transparency of information about privacy and data protection policies, minimization of personal information collection, implementation of effective data protection mechanisms such as encryption and access control, and measures to prevent cyberattacks.

To summarize, the engagement of citizens in e-participation platforms depends on several key factors that determine the success of digital initiatives in the field of governance. First of all, it is critical that the interface design is intuitive, accessible and convenient for users of different ages and levels of digital literacy. This ensures that the platform can be easily navigated and its main functions can be used, and as a result, promotes more active participation of citizens in important government processes. In addition to the technical side, social and organizational aspects are also important. Support for users, especially those with disabilities or lack of digital literacy, is essential to ensure inclusivity and equal opportunities for all citizens. Security and privacy build trust in the platforms and encourage citizens to participate more actively.

Thus, the success of e-participation platforms depends not only on technological features, but also on the way in which these platforms are able to respond to the needs and expectations of citizens, providing them with a safe, convenient and inclusive environment to participate in important public issues.

### III. Methodology

The main research question to be answered is the following: *how does service design facilitate citizen engagement in e-participation platforms, thereby implementing digital democracy in European countries?*

The main hypothesis: *Improvements in the usability and interface design of e-participation platforms are positively associated with higher levels of user engagement and satisfaction.*

This study has two limitations: it focuses on electronic civic participation platforms, excluding social media as a tool for making important public decisions, and it focuses the analysis on several platforms of national importance that are implemented in European countries.

This study focuses on European democracies with the aim to exclude such threats as the use of digital tools for illegal purposes by the authorities to create conditions for totalitarian states, since in some countries, due to the authoritarian method of governance, the existing such services can mostly be fictitious rather than functioning as intended (Smetek et al., 2024). This study focuses on the use of digital tools for the benefit of citizens and the prosperity of democracy, and the will of society. The value objective is to review how digital technologies can contribute to strengthening democratic institutions and protecting human rights in Europe (Michael et al., 2019) and to identify the risks of using them to undermine democratic processes. Particular attention is paid to aspects such as transparency of e-governance, government accountability, and opportunities for civic participation through digital platforms.

Contrary to the common perception of social media as an integral part of digital democracy, this study does not consider such platforms. While acknowledging the potential convening role of social media in bringing people together and spreading the word about initiatives, it is important to recognize its more visible marketing function. This study distinguishes between the roles of social media and targeted digital tools, emphasizing the direct impact of the latter on e-participation and democratic processes. The researchers emphasize that online discussion is not an alternative to political decision-making but a means of enhancing it, so in any representative democracy, discussion by the public, stakeholders and decision-makers is only one step in a complex process of transforming organized preferences into implemented policies (Poorazizi et al., 2015).

The main part of the research approach is a comparative case study. Eight national e-participation platforms in European countries such as Estonia, Latvia, Ukraine, Iceland, Scotland, and Ireland were selected for this design and usage analysis. The choice of these countries is based on 4 pairs of comparisons to study the development and functioning of e-participation platforms in different contexts, both the use of different platforms in one country and the use of one platform or similar platforms in different countries. This choice is explained in more detail in the next section.

To ensure a thorough analysis, the study will look at three important aspects: the policy and procedural, technical, and social dimensions.

*The policy and procedural* aspect focuses on the steps involved in using the platforms to use a particular service, assessing how transparent and accessible the procedural steps are for citizen participation, and whether information on the outcome of proposals is available.

*Technical* analysis assesses the usability and infrastructure of these platforms. Important factors include the user interface, accessibility, complexity of registration and use, the variety of service languages, and the overall user experience. If innovative features are available, they can also be considered to determine the functionality and limitations of e-participation platforms.

*The social* aspect of the study will assess how these platforms facilitate interaction and dialogue between communities. The quality of engagement, the effectiveness of discussion moderation, and the tools provided for discussion and advocacy will be analysed. In addition, the impact of these platforms on public opinion and their influence on policy-making will be investigated to understand their real effectiveness in promoting civic engagement.

The study uses mixed methods of data collection and analysis, with the main methods being manual qualitative analysis of civic participation platforms according to selected criteria and the analysis of reports, as well as short surveys with stakeholders as additional methods.

The conceptual framework of this study is based on previous research on success factors in the development of e-participation initiatives (Panopoulou et al., 2014). The authors note that there is a lack of comprehensive research in the current literature to understand the factors that influence success in this area, so this study aims to fill this gap (Mariani et al., 2023). For example, only 17 articles were found on the central topic of the study by searching for e-

participation platform design and e-participation service design in the Scopus database with a limit in the "Subject area" to "Social Science" and with open access, which indicates a certain theoretical gap in this topic and the need for further research.

In order to offer a thorough comparative analysis of the platforms, based on the preliminary findings of the literature review, a set of evaluation criteria was selected to be used to assess the functions of the civic participation platforms and their effectiveness. As previously identified by scholars, the central aspects that impact people's engagement are ease of use, accessibility and inclusiveness, trust, and social impact (Chan et al., 2021; May & Ross, 2018), so the analysis was based on finding manifestations of these aspects.

To determine whether the platform is **easy to use**, the following criteria were considered:

- *Cross-device support.* This standard assesses the performance of the platform across various devices, including desktops, tablets, and smartphones. It examines if the platform is well-tailored for each device type to deliver a seamless and easy-to-use experience irrespective of screen size or operating system, enabling effective access and use by a wide range of users. This is important because it ensures that citizens can engage with the platform conveniently, regardless of the device they are using.
- *Complexity of registration.* An evaluation of the ease or complexity of the registration procedure for users, considering the number of stages and necessary personal details, is essential for identifying potential obstacles to participation.
- *Navigation (search, menu).* This aspect examines the efficacy of the platform's user interface, particularly how effortlessly users can navigate through its contents, execute searches, and utilize various features via menus or other navigational tools. This examination is integral to understanding the platform's overall user-friendliness (Zaibi et al., 2019).
- *FAQ.* The presence of a FAQ section on the platform is assessed, gauging its ability to address common inquiries posed by users, thereby enhancing user support and information accessibility (Velsen et al., 2007).
- *Support.* An assessment of the availability and effectiveness of customer support options provided by the platform, such as live chat, email support, or a dedicated help center to understand the level of guidance offered to users.

**Accessibility and inclusiveness** are evaluated through the following criteria:

- *Multiple languages.* The assessment aims to determine if the platform accommodates various languages in order to promote inclusivity for diverse linguistic communities. This criterion evaluates the presence of minority languages, thus expanding opportunities for broader civic engagement (Mayan et al., 2013).
- *Accessibility Tools.* An assessment of the platform's accessibility features, such as options for users with visual or hearing impairments, compatibility with assistive technologies, and adherence to web accessibility standards. Such features ensure equitable access to the platform for individuals with disabilities. This not only expands the number of potential users, but also has a social mission to promote the use of such tools by example (Ferri & Favalli, 2018).

**Criteria to assess trust include:**

- *Trusted Authorization.* This criterion evaluates the platform's methods for verifying user identities to ensure that only genuine participants can contribute. Trusted authorization measures may include two-factor authentication, government-verified IDs, or secure digital signatures. It is important to consider these features as they can help build confidence and credibility among platform users.
- *Security policy.* An assessment of the platform's data security and privacy policies, focusing on how user information is handled, stored, and protected. The evaluation includes encryption standards, data anonymization techniques, and adherence to relevant regulations such as GDPR. It is crucial for users to trust that their personal data will be safeguarded when engaging with the platform.

**Social Impact is evaluated through the following criteria:**

- *Closed-feedback loop.* This indicator aims to examine whether the platform provides a transparent system of feedback to users about their contributions. This may include informing users about the status of their suggestions, whether they have been accepted by the authorities, or providing them with information on how their input has influenced policy decisions.

Additional analysis techniques included conducting surveys with key stakeholders of the platform, such as platform managers, developers, and communication managers. For the survey, the questions chosen were those that are difficult to assess by direct analysis and that reveal the management side of the platforms.

Some questions that could not be analysed by manual qualitative analysis were also sent to platform creators and managers via email:

1. Have there been any notable cases where the platform has contributed to a significant impact on the public or policy change?
2. What challenges, if any, have you faced in implementing and developing the service design of e-participation platforms?
3. Does the team collect and incorporate feedback from users outside the platform (e.g., using social media and other resources)?
4. Can you share examples where user feedback has directly influenced the service design of the platform?
5. What future changes are planned for the platform's service design to further enhance citizen engagement and implement digital democracy?

Most of the communication occurred through email. Of the people contacted, 50% responded to the questions, namely Emma Armstrong (Senior Digital Communications and Content Manager at Scottish Parliament), Didzis Melkis (Communications manager at ManaBals), Karl-Hendrik Pallo (Expert at Rahvaalgatus.ee) and Robert Bjarnason (President at Citizen Foundation: Better Iceland). At the initiative of Robert Bjarnason, the identified issues were discussed during the online meeting and digitized after, while all other answers were received in text format.

These surveys allowed for a deeper understanding of the design and implementation decisions behind the platforms, as well as their perceived impact and challenges. The findings from the comparative platform analysis and stakeholder surveys were then synthesized to develop a set of design and implementation recommendations for civic participation platforms that can be applied to enhance their effectiveness and user engagement.

## IV. Case Studies: E-Participation Platforms in European Countries

- **Overview and argumentation of selected platforms (Osale.ee, Rahvaalgatus, Delib, Cap Collectif, Your Priorities, ManaBalss.lv, Miivybir.org)**

The design of civic technology platforms is a complex and multifaceted challenge, as it must balance the needs and expectations of both citizens and government stakeholders (May & Ross, 2017). As a result of the literature review, it can be seen that there is a widespread position that an effective design can significantly influence public participation and the overall impact of these platforms on democratic processes.

However, it should be recognized that due to the complexity and difficulty of civic participation platforms, many variables can affect the effectiveness and engagement of users. In addition to the design service, it can be shaped by cultural, political, and technological factors (May & Ross, 2017). This presents a difficulty in tracing the precise impact of service design. Therefore, it was determined that several distinct cases within different contexts and circumstances should be examined and evaluated. E-participation platforms operate within varied political and cultural frameworks that significantly influence their design and functionality. Therefore, selected e-participation platforms that will be examined in this thesis are: Osale.ee, Rahvaalgatus, NI Direct, Your Priorities (Better Iceland and Scottish Parliament), ManaBalss.lv, and Miivybir.org.

This comparison can reveal which platform features are universally beneficial and which are context-specific and can uncover how local governance styles, cultural norms, and political environments shape the platforms' effectiveness and usage or ease of use. Technical features and accessibility can contribute more to higher citizen engagement. This will enable the assessment of whether platforms with more advanced technical capabilities or simpler, more user-friendly interfaces effectively promote civic engagement.

By examining different platforms in various settings, the study can identify best practices and strategies that enhance user participation. This includes understanding how specific functionalities and design elements translate into higher engagement levels. Insights from such a comparative analysis can guide the development of more effective e-participation platforms worldwide.

For better understanding, it is suggested to consider which contextual features were chosen for each pair of platforms. This can lead to a more nuanced understanding of how design influences the outcomes of e-participation platforms.

**Osale.ee and Rahvaalgatus** are two platforms operating within the same country, Estonia. In this case, comparing platforms within the same country provides a controlled environment for studying how changes in service design affect user participation, as it is a more stable environment, as opposed to evaluating different countries. But it will also take into account the understanding of the role of the state in facilitating or hindering e-participation, as well as internal changes. Studying the transition from one e-participation platform to another in Estonia, from Osale.ee to Rahvaalgatus, and comparing their impact will provide valuable insights into how platform design can influence citizen engagement in a digital country. The Estonian experience provides a unique perspective on the evolution of e-participation tools and their adaptation to the changing needs and expectations of citizens (Toots et al., 2016).

The next two pairs of examples apply and consider different factors and share a similar platform.

In the case of **Better Iceland** and the **Scottish Parliament**, users are using a common platform called **Your Priorities**, which was developed in Iceland by the NGO Citizen Foundations. The design is similar, but there is room for slightly different uses of the functionality, as will be discussed later. By studying one platform, it is possible to explore how it adapts to different political and cultural contexts. This comparative analysis can reveal the nuances that influence citizen engagement, taking into account regional differences in participation norms, expectations, and governmental structures. In particular, it is also worth considering that Iceland and Scotland have different political structures and styles of governance. Iceland is known for its active citizenship and innovative approaches to direct democracy, while Scotland operates within the wider UK political system with its own unique legislative powers and devolved responsibilities (Landemore, 2020). By comparing how Your Priorities functions in these two environments, researchers can gain insights into how e-participation platforms can be adapted to different governmental structures to enhance civic engagement and policy-making processes.

The platforms **ManaBalss.lv** in Latvia and **Miivibir.org** in Ukraine also share a design and origin from a common developer. But they are opposed to each other because of the level of

influence, as the Latvian tool is considered one of the most successful in Europe (Skaržauskienė & Mačiulienė, 2020), while in Ukraine this website is not widely known. This will help to understand the impact of factors such as political culture, levels of citizen trust in government, and technological infrastructure, all of which can significantly influence user engagement and the overall impact of an e-participation platform.

The final pair for the study is the **NI Direct platform** (Northern Ireland) from **Delib** and **Le Grand Débat National** (France) from **Cap Collectif**. The peculiarity for the study is that Delib and Cap Collectif are private companies, which may influence their approach to the development, implementation and nature of the services they provide. Private companies may have more flexibility to innovate and adapt, but may also face different pressures in terms of profitability and customer requirements, in particular, government agencies (Parker et al., 2013). The commercial nature of Delib and Cap Collectif may lead to different priorities in platform development, such as including features that are particularly attractive to government clients or expanding opportunities for innovation that can be realized in the broader market. A study of these platforms will provide insight into how the affiliation of platform providers (private, public, or non-governmental organizations) influences the design and functionality of civic participation platforms.

Analysing the selected platforms through a service design lens can provide valuable insights into the factors that contribute to effective citizen engagement and meaningful impact, and what best practices and design strategies promote user engagement.

General			Ease of use					Accessibility & Inclusion		Trust		Social Impact
Platform	Country	Ownership	Cross-device support	Complexity of registration	Navigation (search, menu)	FAQ	Support	Multiple languages	Accessibility Tools	Trusted Authorization	Security policy	Closed-feedback loop
<a href="#">Osale.ee</a>	Estonia	Government	No	Easy	Easy	No	No	No	No	Available, not limited to	No	No
<a href="#">Rahvalgatus</a>	Estonia	Non-profit	Yes	Easy	Easy but no search	No	No	Yes	Good	Yes	Yes	Yes
<b>Your Priorities:</b> <a href="#">Better Iceland</a>	Iceland	Non-profit	Yes	Easy	Average	No	No	Yes (auto translator)	No	No	No	No
<b>Your Priorities:</b> <a href="#">Scottish Parliament</a>	Scotland	Non-profit	Yes	Easy	Average	No	No	Yes (auto translator)	No	No	No	No
<a href="#">ManaBalss.lv</a>	Latvia	Non-profit	Yes	Easy	Easy	No	No	No	No	Yes	No	Yes
<a href="#">MiiVybir.org</a>	Ukraine	Non-profit	Yes	Easy	Easy	No	No	No	No	No	No	No
<a href="#">Delib: NI Direct</a>	Ireland	Private company	Yes	Easy	Easy	Yes	Yes	No	Good	Yes	Yes	Yes
<a href="#">Cap Collectif: Le Grand Debat National</a>	France	Private company	Could be better	Easy	Average	Yes	Yes	No	Good	Yes	Yes	Yes

Table 1. Table of platforms analysis according to the evaluation criteria

## V. Detailed analysis of platforms in comparison

### 5.1. Osale.ee and Rahvaalgatus

#### 5.1.1. Osale.ee

##### Background

Internationally, there is a widespread perception that Estonia is a pioneering country that has begun to use innovative solutions in the field of digital governance and e-governance on the way to strengthening the democratic process and freedoms (*The Five Factors of Success Behind Estonia's Citizen Empowering Platform*, 2023). One manifestation of this has been the introduction of a number of platform options that would enable citizens to participate in the shaping of their country's policies and legislation. These platforms have replaced each other, and an analysis of the design of the two services – Osale.ee and Rahvaalgatus.ee can also contribute to understanding the conditions and circumstances under which these transitions took place.

The goal of Osale.ee was to enhance transparency and openness in decision-making, ultimately leading to higher-quality public policies and legislation. Developers intended for government agencies to share their draft policies, plans, laws, and provisions on the public consultation website, though submissions were voluntary and not mandated by administrative procedure.ee emerged in the mid-2000s as part of a national initiative in Estonia to strengthen citizen engagement (Åström et al., 2013). The platform was designed to address the shortcomings of its predecessor, TOM ("Today I Decide"), by more effectively incorporating it into official government processes. [Osale.ee](#) had to address issues such as more active promotion of projects, improved accessibility of information (e.g., organizing citizen ideas by topic), and a redesign (Toots et al., 2016).

Launched in 2007, [Osale.ee](#) was designed as a public consultation portal where draft laws could be viewed and discussed, and a year later the platform was expanded to include features that allowed citizens to submit proposals, collect feedback, and tally support through voting (Toots et al., 2016). The designers intended that government agencies would be able to share their draft policies, plans, laws, and regulations on the website for public consultation, although submissions were voluntary and not subject to administrative procedures.

As identified by the researchers, the main problems went beyond the platform's capabilities, with the lack of clear strategic goals, the complex nature of government processes, and insufficient adaptation to new technologies such as smartphones and social media being significant obstacles (Keramidis & Charalabidis, 2021). In addition, the platform suffered from a lack of political support and cultural readiness, which further reduced its effectiveness.

It is suggested to consider how this was manifested in the service design of the platform. As the [osale.ee](https://osale.ee) website now redirects to another government resource, the analysis is based on the archived version of the website.

### **Ease of use**

The website comprises four primary pages: Homepage, Consultations, Ideas, and Laws. The Homepage features the latest information on recently added ideas, consultations, opinions; as well as a section highlighting the most read consultations and ideas. Consultations serve as a repository of draft regulations/laws that allow citizens to voice their opinions before they are presented to Parliament. This part of the website has been relocated to [eelnoud.valitsus.ee](https://eelnoud.valitsus.ee). Meanwhile, Ideas functions as an archive for user-submitted ideas which can be voted upon by other users in favor or against the idea. Subsequent to voting, typically a response from the relevant ministry is provided.

It provides a general understanding of how users can interact with different sections, for example, express their opinions on draft laws through consultations and participate in submitting ideas for collective voting with a subsequent response from government ministries. Therefore, the website structure is straightforward to understand and easy to follow. Due to its simplicity, **navigation is easy** and the entire user path is visible via “breadcrumbs”, giving the ability for the user to easily trace back the route. The website provides **search functionality** giving its users an ability to quickly search needed information.

The **cross-device support** of the website has remained largely unchanged since its development in 2007, even though mobile internet traffic has surged to over 60% in 2024 (*Internet Traffic from Mobile Devices (May 2024)*, 2022). The website continues to function effectively on desktop devices, but poses challenges for users accessing it via tablet and mobile devices.

**Registration on the platform** supports government-issued MobileID and ID card, enhancing security of the platform and ensuring validity of its users, however, registration by password was also functioning, which opens up possibilities for creating fake accounts. This leads to the understanding that the platform relies on either a highly secure form of identification or allows more open access, presenting a trade-off between accessibility and security (Kalja et al., 2015).

There is a lack of modern features like **FAQ** or **Support** tools on the website, which could be attributed to its age. While the simplicity of this platform may render an FAQ unnecessary, implementing Support functionality could facilitate two-way communication with users and offer valuable insights for enhancing the platform's performance.

### **Accessibility & Inclusion**

The websites aim to meet the WCAG 2.0 guidelines for accessibility, with the text content being easy to read and presented in a clear hierarchy (*Web Content Accessibility Guidelines (WCAG) 2.0*, n.d.). Mentioned recommendations were invented in 2008, a year after the platform was launched, and the assessment of the presence of certain points also indicates that the platform was ready for rapid updates as time went on. Osale.ee faced challenges in terms of modern accessibility standards and inclusion because of the following criteria.

The platform was only accessible in Estonian, which restricted its use for non-native speakers and minority communities within Estonia. Osale.ee did not meet contemporary web accessibility standards fully, as it lacked important accessibility tools like adjustable text sizes or high-contrast modes that are necessary for users with visual impairments.

### **Trust**

Trust plays a key role in attracting citizens to e-participation platforms such as [Osale.ee](https://osale.ee). As analysed, the platform used government-issued MobileIDs and ID cards to verify users, offering a high level of security and ensuring that only verified participants can contribute (Kitsing, 2010). This security measure helped build trust among users, reinforcing the integrity of the consultation process. However, the possibility of registering with a password potentially allowed for the creation of fake accounts, which called into question the authenticity of users. In addition, [Osale.ee](https://osale.ee)'s security policy complied with Estonian data protection law, although it lacked the more advanced privacy features found in modern e-government platforms.

## **Social Impact: Closed feedback loop**

[Osale.ee](https://osale.ee)'s structure allowed public proposals to receive feedback and recognition, thereby influencing public opinion and fostering a sense of contribution. However, this transparency was sometimes limited by the lack of regular updates on the progress of specific proposals. The absence of comprehensive support and feedback tools made it difficult for users to verify that their contributions were valued. However, the relatively simplistic design and outdated technical features prevented the creation of a more lively and interactive civic environment. The platform laid the groundwork for further development of more comprehensive and user-friendly digital democracy tools.

### **5.1.2. Rahvaalgatus**

#### **Background**

In contrast to [Osale.ee](https://osale.ee), the [Rahvaalgatus.ee](https://rahvaalgatus.ee) platform is not operated by a government institution, but by an independent think tank (the Estonian Cooperation Assembly) founded by the President of Estonia (Saar et al., 2024). [Rahvaalgatus](https://rahvaalgatus.ee) was created to replace [Osale.ee](https://osale.ee) with the aim of strengthening citizen engagement and streamlining the e-participation process. Launched in 2016, it is designed to help Estonian citizens submit collective proposals directly to the Estonian parliament. As of early 2024, experts say that [Rahvaalgatus](https://rahvaalgatus.ee) is uniquely positioned in Estonia, as it is the only active e-participation platform designed to facilitate citizen participation in national decision-making (Saar et al., 2024).

The platform was designed to facilitate bottom-up civic initiatives and provide an official channel for citizen petitions. Once a proposal reached 1,000 signatures, it would be automatically submitted to parliament for review (*About*, n.d.). [Rahvaalgatus](https://rahvaalgatus.ee) also offered tools for users to collaborate on proposals, discuss their ideas, and receive feedback.

The main aim of [Rahvaalgatus](https://rahvaalgatus.ee) was to enhance citizen involvement and simplify the process for submitting proposals. It offered various features including electronic signature collection using government-issued ID or MobileID, collaboration tools for working on proposals collectively, direct submission to the Estonian parliament upon reaching 1,000 signatures, and clear feedback on submitted proposals explaining governmental decisions.

#### **Ease of use**

Rahvaalgatus was meticulously engineered to prioritize user-friendliness, ensuring the platform was accessible and effective in engaging citizens in participatory processes. Its **structural design** was methodically organized to guide users seamlessly through the critical phases of proposal development, collaboration, and formal submission. This was achieved through a logical configuration of the website which facilitated user **navigation**. The interface included a top menu bar that directed users to essential sections such as Initiatives, Guides, and About. Each project was directly accessible from the homepage, categorized distinctly to enhance user experience and simplify the browsing process. This design allowed users to easily engage with the system, from initiating proposals to participating in discussions and signing petitions.

However, the platform did exhibit some limitations, notably the absence of a **search** function, which became a significant hurdle as the number of initiatives grew. This deficiency hindered users' ability to efficiently locate specific initiatives, potentially impeding user engagement and participation.

Furthermore, while the platform supported interactive features such as commenting and replying to comments, this sometimes resulted in non-constructive discussions, especially on contentious issues. Despite these challenges, Rahvaalgatus demonstrated a strong commitment to inclusivity **across various digital devices**. It was optimized for a range of devices including desktops, tablets, and smartphones. The responsive design ensured that the platform maintained functionality and effectiveness across different screen sizes, thereby supporting widespread user engagement irrespective of the device used.

### **Accessibility & Inclusion**

Rahvaalgatus was conscientiously designed to maximize accessibility and inclusivity, incorporating several features aimed at enhancing the platform's usability and extending its reach to a diverse audience. Central to this approach was the implementation of **multilingual support**, with the platform offering interfaces in Estonian, English, and Russian. This linguistic diversity not only catered to native speakers but also accommodated non-native residents of Estonia, thereby broadening the platform's demographic appeal. The option to switch languages was readily accessible via the main menu, facilitating ease of use for all users.

In addition to language support, Rahvaalgatus was committed to adhering to contemporary **web accessibility standards**, which was evident in its compatibility with assistive technologies,

such as screen readers. The platform was designed with features to aid users with visual impairments, including adjustable text sizes and the availability of high-contrast themes. These thoughtful design choices ensured that users with varying degrees of visual capability could navigate the website comfortably and participate fully in the democratic processes facilitated by the platform. Through these measures, Rahvaalgatus demonstrated a strong commitment to creating an inclusive digital environment that supports civic engagement across a spectrum of the population.

## **Trust**

Trust was a foundational element in the success of Rahvaalgatus, and the platform implemented several strategies to cultivate and sustain this trust among its users. Central to these efforts was the establishment of a **trusted authorization system**, which required users to authenticate their identity using government-issued ID or MobileID. This authentication process was critical in ensuring the legitimacy of signatories and the authenticity of proposals submitted through the platform, thereby mitigating the risk of fraudulent activities and misuse.

It is important to note that the identity of the signatories is not public, and all personal data is removed from the Rahvaalgatus system after the CI is submitted to the parliament or local authorities (Saar et al., 2024), which reduces possible concerns of citizens about the consequences of their participation in supporting a particular initiative.

Furthermore, Rahvaalgatus adhered to rigorous **security policies** in line with Estonia's data privacy laws, ensuring the protection of user information. The platform employed advanced encryption and anonymization techniques to secure personal data, aligning with the standards set by the European Union's General Data Protection Regulation (GDPR). These measures reinforced the platform's commitment to maintaining user trust through robust security practices, thereby supporting a secure and trustworthy environment for civic engagement.

## **Social Impact: Closed feedback loop**

It should be noted that the platform constantly updates statistics that demonstrate the effectiveness of the platform itself through the number of signatures collected over 8 years of operation and the number of initiatives submitted to the Parliament. As of May 2024, more than 757,000 signatures have been submitted, and 252 initiatives have been sent to the parliament and local municipalities (*Rahvaalgatus*, 2024). You can also see the statistics for

the last 30 days, which shows how many initiatives have been submitted, how many signatures have been affixed, and how many discussions have been started. This clearly shows that the platform is operational and active, and encourages citizens to increase these numbers and become active users.

The analytical articles also emphasize the importance of collaboration, which Rahvaalgatus facilitates and promotes. Users can comment on and discuss each other's proposals during a required co-creation phase that lasts at least 3 days (The Five Factors of Success Behind Estonia's Citizen Empowering Platform, 2023). This feature has led to more thorough and inclusive proposals, as users can enhance each other's ideas, address potential weaknesses, and merge similar initiatives by connecting with each other.

The platform has certain moderation and terms of use, including requirements such as constitutionality of the proposal, prohibition of hatred and offensive language, encouragement to provide solid arguments and explanations to justify their proposal. In case of violation, the resource staff reserves the right to remove initiatives and comments that violate the terms of use. These restrictions are sufficiently balanced and fair to avoid conflicts and encroachments on fundamental constitutional norms that protect human and people's rights.

An important component is that the Rahvaalgatus invests in showing citizens the movement from a proposal to its consideration by the authorities. Karl-Hendrik Pallo, an expert of the platform, admits that the biggest challenge was to close the feedback loop, but they succeeded thanks to close and effective cooperation with the parliament. A number of initiatives that reached the required threshold of signatures led to parliamentary debate and subsequent legislative action. The platform offers detailed visibility into the signature collection process and provided timely responses to each proposal that were publicly available.

Using the example of the Petition to amend the Family Law, which was submitted in 2020, you can see what stages it went through (Petitsioon Perekonnaseaduse Muutmiseks, 2020). This includes the following information: how many signatures were collected and when, confirmation that it was sent and received in the parliament, accepted and considered in the committee, what decision was proposed, and information that in 2023 marriage was legalized in a gender-neutral way, and therefore the issue under consideration was resolved. All this information was supported by official documents.

This not only allowed users to track the progress of their initiatives, but also provided an opportunity to review the official responses of parliamentarians, thus maintaining transparency and accountability of the process. The mechanism also enhanced accountability by building trust in the democratic process by demonstrating that public input is taken seriously and carefully considered.

One may question the specific role of the platform in the passage of the law and the causality of the decision to legalize same-sex marriage or other initiatives. Karl-Hendrik Pallo, an expert at Rahvaalgatus.ee, also admits that it is difficult to track down the exact reason for the policy change. According to a rough estimate, the platform's developers were able to determine that only a little more than 20% of approved initiatives can be attributed to promoting or helping to promote change - whether through mobilizing media support, as a tool for long-term advocacy work by civil society organizations, or otherwise. He also noted that the Rahvaalgatus team is currently working to find sociologists to research the exact percentage of cases where the platform has contributed to significant social impact or specific policy changes.

However, the way the service is built and the design of the platform is a confirmation of the initiative's path to the legislature, which is an important element in reflecting the will of the people, discussing and actualizing hidden existing problems. The authors of this initiative themselves note the importance of the fact that they were able to use the platform to open up the entire public debate on this topic and break the silence around it (The Five Factors of Success Behind Estonia's Citizen Empowering Platform, 2023).

### **5.1.3 Comparative analysis**

In the comparative analysis between Rahvaalgatus and [Osale.ee](#), several differences can be identified in the political-procedural, technical and social aspects, which emphasize the enhanced functionality and user engagement of the former.

The Rahvaalgatus stands out for having implemented a clearly defined process for submitting and legislating proposals. This structured approach contrasted sharply with [Osale.ee](#), where submitted proposals often faced ambiguous paths to governmental consideration. The Rahvaalgatus has closely linked its procedural framework to parliamentary activities, making it transparent that proposals that reach the required threshold of signatures receive the necessary attention and consideration by the government. Also, the process of working with the government is streamlined, as data is sent from Rahvaalgatus.ee directly to the parliament's

information system without the need to upload or download documents, which facilitates the processes.

From a technical standpoint, Rahvaalgatus has succeeded by integrating modern web development practices that support a responsive design that adapts to different devices. The registration system was simplified by using government-issued ID cards for authentication, which simplified the user experience. In addition, the platform was multilingual, targeted at a wide audience, and had an intuitive user interface that made it easy to navigate. Rahvaalgatus also boasted advanced collaboration and feedback tools that increased its functionality and user engagement.

Socially, Rahvaalgatus created a more dynamic environment for civic engagement than [Osale.ee](#). It provided users with robust collaboration tools that enabled collective refinement of proposals. This makes it possible to engage the community in a dialog. The platform's feedback mechanisms further contributed to this by increasing transparency and accountability, thus creating a conducive and open space for interaction and dialogue between communities.

The platform's expert in the survey mentioned that they are committed to development and, in particular, plan to improve the platform in such a way as to create more engaging data for users through easy-to-read graphs on civic initiatives on the page and to customize the comments section to make it easier to provide feedback on comments that contradict the terms of our platform.

Rahvaalgatus showed significant improvements compared to Osale.ee in terms of user participation and engagement. The platform has attracted a more diverse user base, partly due to an improved interface and a simplified proposal submission process. More initiatives reached the required threshold of signatures, which led to an increase in the number of proposals submitted to the parliament.

It is worth noting that the reaction to initiatives is not instantaneous and there are no prerequisites for this due to the vertical system, which does not yet have room for the creation of a "fourth branch of government" in the form of the people. In general, the results of the platform's work should be considered long-term because of their significant contribution to the actualization of problems for the legislature. Therefore, it can be argued that the Rahvaalgatus platform is organically developing in a digitalized society, meeting the needs of people for a

convenient, high-quality tool for expressing their ideas, problems and suggestions, satisfying their rights in a democratic state.

## **5.2. Your Priorities: Better Iceland and Your Priorities for Scottish Parliament**

### **5.2.1. “Your Priorities” platform analysis**

#### **Background and Purpose**

This section will look at two platforms, Better Iceland and Scottish Parliament, which are based on the same system, Your Priorities. Your Priorities is a cloud-based online idea generation, discussion and decision-making platform (*Your Priorities Features Overview - Citizens Foundation*, n.d.). This is one core platform that is flexible and allows other people to use different features depending on their needs.

The Your Priorities platform was developed as part of the Better Iceland initiative by the Icelandic non-profit organization Citizens Foundation in 2008 (*Your Priorities Features Overview - Citizens Foundation*, n.d.). In general, it should be noted that Iceland has made a great leap forward in terms of Internet penetration. Back in 2008, when the analysed platform was launched, 88% of the population had access to the Internet at home, and 86% of the population used the Internet every day, and of course, with time and development, these numbers continued to grow (Åström et al., 2013). In those years, there were ambitious goals in government documents such as "Iceland - An e-Nation," Iceland's policy document for 2008-2012, that "Icelanders will become a leading nation in e-services and the use of information technology" and that "Iceland will become an e-nation offering high quality self-service in one place" (Åström et al., 2013).

The platform was designed to empower citizens, enabling them to actively express their ideas and participate in the policy-making process. Launched in the wake of the financial crisis, it was conceived as a means of restoring trust in the government, increasing transparency and citizen participation. The primary objective of the platform was to foster a collaborative environment where citizens could not only share but also collectively develop their ideas, thereby increasing the depth and breadth of civic engagement («Your Priorities Features Overview», n.d.). The space also had to support open dialogue, ensuring that discussions were visible and accountable to all participants.

Due to the same design, it will be advisable to consider these two platforms in parallel.

### **Ease of use**

The "Your Priorities" platform employs a hierarchical structure to organize ideas, which starts at the community level, narrows down to specific groups, and finally focuses on individual ideas. This clear organization facilitates user navigation by allowing for straightforward progression from broad community discussions to more detailed group and idea interactions. Several features contribute to the platform's user-friendliness.

Ideas are nested within groups, which are part of larger communities. This arrangement aids users in easily navigating the platform, transitioning smoothly from general discussions to specific topics. Each idea has a dedicated section for debate, where users can voice their support or opposition. This setup encourages active and constructive dialogue among participants. Robert Bjarnason emphasized that this breakdown of the policy into the most important parts is also done to emphasize the parts where it is useful to get input from the government, because some parts of the policy are template laws that simply cannot be changed for various reasons, and there are laws that are actually useful for citizens, broken down into very simple categories, and then the user just clicks on a subcategory and can easily contribute.

These elements collectively enhance the platform's ease of use, promoting user engagement by minimizing barriers to participation. However, there are indications of an outdated interface that could potentially hinder user experience.

The absence of a breadcrumb navigation system complicates the user's ability to backtrack through the platform. This omission can make navigating between different levels of ideas, groups, and communities cumbersome. The platform's design appears simplistic and somewhat archaic, characterized by a block-based layout. It lacks dedicated sections for highlighting "Popular Ideas" or "Recently Active Groups," which could otherwise help users easily discover trending discussions and new content. This not only affects the aesthetic appeal but also reduces the platform's functionality in showcasing active or relevant discussions.

Addressing these design shortcomings could significantly improve navigation and enhance overall user engagement, making the platform not only functional but also more appealing and effective for its users.

## **Accessibility & Inclusion**

The "Your Priorities" platform strives to be accessible and inclusive in fostering civic engagement, but some areas need improvement.

While the platform supports multiple languages, this is facilitated through an automatic translation tool. Although this allows users to interact with content in their preferred language, automated translation may not always capture nuances accurately, potentially leading to misunderstandings. According to Robert Bjarnason, President at Citizen Foundation, this decision was made after the tourist boom in Iceland, when about 10,000 people moved to Reykjavik from Poland and from all over the world, from the Baltic countries. The government offered to create English, Polish, and Lithuanian versions of the site, but the NGO decided to use artificial intelligence. It should be considered that such a response to challenges can sometimes have misunderstandings due to translation errors, but this solution has covered many more countries and languages.

Despite a simple and minimalist interface, specialized accessibility features like adjustable text sizes, high-contrast modes, or compatibility with screen readers are absent. This makes navigation challenging for users with visual impairments or other disabilities.

The platform has a responsive design to function across desktops, tablets, and smartphones. However, the simplistic block-based structure doesn't always scale well, occasionally leading to a compromised user experience on mobile devices.

Addressing these deficiencies would markedly improve the platform's functionality and user experience, thereby fostering a more supportive and effective environment for civic discourse. Such improvements are crucial for ensuring that the platform not only reaches but effectively serves a diverse user community.

## **Trust**

Trust is an indispensable element in online engagement platforms, particularly those designed to influence public policy and foster community initiatives. In examining platforms such as "Your Priorities: Better Iceland" and "Your Priorities: Scottish Parliament," it becomes evident that the trust factor is significantly shaped by a series of design and policy decisions.

Both platforms facilitate a registration process devoid of email verification, intending to reduce barriers to entry and enhance broad participation. Despite these advantages, the lack of stringent user authentication methods, including government-issued ID verification or two-factor authentication, presents a vulnerability. This weakness makes it difficult to ensure the authenticity of contributions, raising the possibility of manipulation by external entities.

While adhering to basic data protection regulations helps safeguard user information, the lack of advanced security measures perpetuate concerns regarding data privacy and the potential for misuse of personal information. Addressing these trust-related concerns is crucial for boosting user belief.

### **Social impact: Closed feedback loop**

The concept of a closed feedback loop is an integral part of the social impact of online engagement platforms, especially in the way they manage community engagement and idea development. Several features were noticed on the Your Priorities platform in this regard.

In particular, it should be noted that in the structure of debates on the platforms, users have the opportunity to vote "for" or "against" opinions, which greatly helps to quickly identify popular or prevailing sentiments. These ratings are updated in real time, providing immediate and transparent feedback on the community's opinion, which serves as a barometer of the resonance or rejection of certain points of view. Also, the discussion is structured in such a way that the user can express his or her opinion separately from the comments of others, and there is no possibility to comment on the position of another user. The president of the NGO Citizens Foundation emphasized that this design feature was a response to the manifestations of uncontrolled conflicts and personal insults during the debate. Also part of this is the inclusion of a mechanism for reporting content that violates the platform's rules, which plays a crucial role in maintaining a respectful and correct dialogue.

Functionality that allows government officials or designated moderators to respond to popular ideas is vital for building trust within the community. It shows that user input is recognized and valued. Complementing this system with a more structured feedback loop will provide clearer evidence of how discussions and ideas influence policy decisions, thereby building trust among users. Strengthening this aspect of transparency could increase confidence in the effectiveness of these platforms.

### **Social impact: Better Iceland**

Robert Bjarnason, President at Citizen Foundation, emphasized that their focus as a civil society organization is very much on improving the decision-making process. The expert defines the work of the NGO as a partnership with open government, when it comes to open government that is being united, "it's not just the government offering democracy as a service to people, because that doesn't make any sense, but rather it's working with civil society and citizens on open government and democracy projects." And yet he also makes the interesting point that while the government wants and needs results, because while democracy is valuable and there is a desire to improve it at all levels, it is not practical to simply demand more democracy and let everyone vote on everything. He recognizes that "our existing system, which includes government and bureaucracy, must work together harmoniously for effective outcomes."

### **Social impact: Scottish Parliament**

The Your Priorities platform in Scotland is in the hands of the parliamentary team, which claims it is a conscious choice of the parliament to engage the tool and initiate discussions among citizens. According to information provided by Emma Armstrong, Senior Digital Communications and Content Manager at the Scottish Parliament, this team is called the Digital Engagement Tools Team with a specific remit to innovate and test new tools to find the right tool for a particular request, depending on what information the committee is trying to get from the public and from whom it wants to hear it. For the parliament, Your Priorities is a more in-depth tool that they use when they need to talk to people more and explore ideas in more detail. The functionality also allows people to vote for ideas, which means that their popularity can be assessed among those who participate in the discussion. The questions that lend themselves to this type of consultation are usually either open-ended (questions like "what should be solved...") or focused on issues that are everyday or tangible for most people (non-technical questions that require a certain level of knowledge to join the discussion).

The expert noted that despite the flexibility and ease of the platform, the challenge sometimes is the lack of understanding of the purpose and conceptual use of a platform such as Your Priorities. To overcome this challenge, the team created a set of case studies and delivered presentations to demonstrate how Your Priorities has been successfully used in a variety of

ways in the Scottish Parliament. The examples included the following ways of using the platform:

- Generating ideas and suggestions for planning future work on community wellbeing (received 220 ideas and over 400 comments from over 650 people);
- Generating questions that could be asked directly to ministers and government officials during public hearings, which were then sorted and the selected ones were recorded to be posted on the platform (60 questions were proposed, of which 25 were asked);
- Providing feedback and comments on specific aspects of the fireworks and pyrotechnics legislation (over 1,400 people participated in the online discussion, leaving over 1,600 comments and nearly 11,000 ratings);
- Calling on the public to share their experiences on the potential impact of the draft law on civil partnerships in the form of a video/voice message/written comment (40 people and five organizations shared their views);
- Collecting feedback from parents and guardians on access to paid childcare (42 applications from parents and guardians from 15 districts) (Case study 2024, 2024).

This approach provided simple and clear examples to show possible options for interacting with the platform. This shows that some needs and issues can be addressed not centrally by the developer of a particular platform, but more individually by a specific user, to whom the platform is moderated and such updates can be taken over in the future.

### **5.2.2. Comparative Analysis**

When analysing "Your Priorities: Better Iceland" and "Your Priorities: Scottish Parliament," distinct variations and commonalities are evident across several dimensions, including policy-procedural, technical, and social aspects.

The platforms are noted for their intuitive user interfaces, which facilitate easy navigation for newcomers, guiding them through the process of idea submission and voting. However, the lack of sections highlighting popular or recently updated ideas curtails the discoverability of new content, and the absence of advanced search functions limits the ability to locate specific discussions or proposals swiftly. Technologically, both platforms operate on the "Your Priorities" system, characterized by a block-based structure that may seem simplistic or outdated, lacking advanced navigational aids such as breadcrumb links. They incorporate automatic translation for multilingual support, although the accuracy of translations can be

inconsistent. While designed to be cross-device compatible, the platforms sometimes struggle with adaptive design on different screen sizes. The absence of comprehensive authentication processes, relying solely on open registration without email verification, raises concerns regarding the authenticity of accounts and the potential for spam.

Trust remains a critical issue, challenged by the open registration process that lacks rigorous verification. While both platforms adhere to standard data protection regulations, providing basic privacy safeguards, the transparency of the debate process and the mechanisms for reporting violations only partially address trust concerns. The lack of stringent user authentication presents potential risks for manipulation or misuse of the system.

Efforts to ensure accessibility are hampered by the reliance on automatic translation tools and the absence of specific accessibility features like adjustable text sizes or high-contrast modes, which restricts inclusivity. Enhancing these aspects and offering professionally translated content could significantly broaden their appeal and usability.

Both platforms are designed to enhance citizen participation through mechanisms that enable the submission, discussion, and voting on proposals. However, their interactions with governmental structures differ significantly. "Better Iceland" employs a direct engagement model, allowing citizens to submit ideas that influence both local and national policymaking. In contrast, "Scottish Parliament" focuses on facilitating the connection between the public and legislative bodies, often leading to parliamentary review and legislative action, providing a more formalized route for public ideas to gain recognition at the legislative level.

In terms of social engagement, both platforms contribute significantly to transparency in policymaking. "Better Iceland" generally supports grassroots initiatives, promoting local collaboration and citizen-driven solutions. Conversely, "Scottish Parliament" offers a more structured approach, providing a pathway for public ideas to be considered by government officials, thus enhancing the perceived impact of public participation on policymaking. Despite promoting open dialogue and building community solidarity, both platforms do not fully exploit social networking tools to maximize engagement.

The platforms have markedly influenced their respective societies. "Better Iceland" has empowered citizens to actively participate in shaping public policy, thus fostering enhanced civic engagement and transparency. "Scottish Parliament" has facilitated a more formalized process for incorporating public input into parliamentary debates and policy development,

promoting active democratic participation. Both platforms have bolstered social cohesion by cultivating a robust sense of community involvement and collaboration.

### **5.3. ManaBalss.lv (Latvia) and the Ukrainian version of this platform Miiwybir.org (Ukraine)**

#### **5.3.1. Platform analysis**

##### **Background and Purpose**

ManaBalss.lv, established in 2011 by the NGO "Society Participation Fund" in Latvia, serves as a digital platform designed to empower citizens to influence political decisions directly (Lironi, n.d.). By enabling the collection of signatures for proposals submitted to the Latvian parliament (Saeima) and other institutions, ManaBalss.lv advances digital democracy, inclusivity, and a participatory society both within Latvia and internationally. Proposals must meet certain quality standards. An interesting aspect is that a collective petition must collect at least 10,000 signatures of Latvian citizens who are at least 16 years old on the day of the petition to be considered by the Saeima (Lironi, n.d.). This is a comparatively very high threshold, in particular, 10 times higher than in Estonia, a country with a similar population. However, according to Didzis Melkis, communications manager at ManaBalss, such a high participation threshold is not a challenge in a negative sense, but is positive and stimulating.

Similarly, Miiwybir.org in Ukraine, a component of the MyVoice network, provides a platform for citizens to initiate proposals for review by the Presidential Administration, Verkhovna Rada (Parliament), or the Cabinet of Ministers. Inspired by the success of ManaBalss.lv, Miiwybir.org aims to facilitate direct civic engagement with governmental authorities to ensure public voices are acknowledged. Initiatives on this platform must gather a minimum of 25,000 signatures within three months.

Based on these figures, it can be already noted the fact that both ManaBalss.lv and Miiwybir.org have set specific thresholds for the number of signatures required to advance a proposal that takes into account the differences between states, in particular, based on the population (Handbook on E-democracy, n.d.). This indicates a deliberate effort to ensure that only proposals with a significant level of public support are considered, increasing the legitimacy and impact of the participatory process. This detailed analysis aims to examine the role of service design in the functionality and effectiveness of e-participation platforms, specifically

ManaBalss.lv and Miiivybir.org, also taking into account the different effectiveness and efficiency of these platforms, despite the identity of the design.

### **Ease of use**

The platform's user experience is intended to be simple and easy to understand, incorporating various important features that improve usability. The navigation system is efficient, allowing users to easily explore different sections of the website, including recently voted-for initiatives, new initiatives, and successful ones. This categorization helps users locate initiatives quickly without overwhelming them with excessive information. Additionally, the platform includes a strong search function enabling users to efficiently find specific initiatives – particularly helpful for those with particular interests or topics.

Despite the simplicity and functionality of the design, it appears somewhat outdated. While simplicity aids usability by reducing clutter and distraction; a modernized appearance could enhance visual appeal as well as user engagement. Key functions such as creating, sharing, and supporting initiatives work smoothly. However, one significant drawback concerns the login systems: while ManaBalss.lv supports online banking and gov-ID logins - Miiivybir.org only supports login through Facebook – raising security and privacy concerns in Ukraine.

### **Accessibility & Inclusion**

The platforms demonstrate a mixed performance regarding accessibility and inclusion. Language support is limited to the native languages—Latvian for ManaBalss.lv and Ukrainian for Miiivybir.org—which may restrict accessibility for non-native speakers and minority groups within these countries. Despite the simple and minimalist interfaces, specialized accessibility features such as adjustable text sizes, high-contrast modes, and screen reader compatibility are notably absent, posing navigation challenges for users with visual impairments or other disabilities.

However, the platforms employ responsive design, ensuring functionality across desktops, tablets, and smartphones, which is essential for broad accessibility. Additionally, ManaBalss.lv employs strict authentication methods to ensure the legitimacy of signatories and the authenticity of proposals, thereby reducing the potential for manipulation or misuse. Overall, while the usability and functionality of the platforms are commendable, there is room for improvement in terms of modernization, language support, and accessibility

## **Trust**

The trustworthiness of Miyvybir.org is compromised by its exclusive use of Facebook for login purposes, as many users are reluctant to link their social media accounts to other services due to privacy concerns. The mention of BankID without offering it as an option further exacerbates this trust issue, creating a disconnect between user expectations and actual service offerings. To enhance trust, the platform must assure users of the security and privacy of their data, as it works with platform in Latvia. Clear communication about data handling practices and the implementation of robust security measures are essential for building and maintaining user trust.

## **Social impact: ManaBalss.lv (Latvia)**

ManaBalss.lv has had a profound impact on Latvian society and beyond, showcasing the significant role digital platforms can play in fostering civic engagement and influencing policy. According to the data provided by the Communications Manager at ManaBalss Didzis Melkis, as of April 2024, since 2011, out of 131 initiatives considered in the Parliament, Seimas and governmental authorities, 76 initiatives have been approved and implemented into national legislation, which, according to analysts, is the highest success rate in the world among platforms of this type. In total, since 2011, the platform has attracted 528,262 unique users and a total of 3,621,622 votes for the 1,015 initiatives that have ever been published.

Since its launch in 2011, ManaBalss.lv has become an important tool for Latvian citizens to participate in the legislative process. More than 20% of the population has used the platform to support various initiatives, which has significantly increased civic engagement and contributed to the development of participatory democracy (Valtenbergs & Čaplinska, 2021). The initiatives adopted cover a wide range of social, economic and environmental issues. ManaBalss.lv empowers citizens by providing a transparent and accessible process for initiating and supporting petitions. The platform's support mechanisms, including legal and advisory assistance, help initiative authors improve their proposals and increase their chances of success.

According to the expert's comments obtained through the survey, it was also emphasized that the platform was also used to introduce an amendment to the Constitution regarding open voting for the President of Latvia in the Saeima. This solved the problem that in previous presidential elections there were always discrepancies between politicians' public promises to

support a particular candidate and the actual vote, which led to unclear backroom compromises and agreements and, as a result, constantly undermined public confidence in democratic processes. Through a digital civic initiative, Transparency International Latvia campaigned for change and succeeded in getting the constitution amended in 2018.

Since its inception in 2011, ManaBalss.lv has become an essential tool for Latvian citizens to engage in the legislative process. Over 20% of the population has used the platform to support various initiatives, significantly enhancing civic engagement and promoting participatory democracy (Fuller, 2024).

The platform has successfully facilitated the passage of 54 initiatives into law, addressing a wide range of social, economic, and environmental issues. This track record underscores the tangible impact of collective civic action on national policy-making. ManaBalss.lv empowers citizens by providing a transparent and accessible process for initiating and supporting petitions. The platform's support mechanisms, including legal and advisory assistance, help initiative authors refine their proposals and increase their chances of success.

ManaBalss.lv's success has garnered international acclaim, including awards such as the European Citizen's Prize and recognition from global organizations like the Innovation in Politics Institute (*ManaBalss.lv - līdzdalības platforma*, n. d). The platform is cited as a model for digital democracy, influencing similar efforts in other countries.

ManaBalss.lv continuously develops new digital tools and improves existing ones to ensure broad accessibility and inclusivity. This includes enhancing the platform's functionality and ensuring it remains user-friendly and engaging for all citizens, thus fostering a more inclusive participatory society. Its continued efforts to innovate and expand the digital democracy ecosystem underscore its commitment to fostering a more participatory and inclusive society in Latvia and beyond.

The success of ManaBalss.lv is also confirmed by international recognition, including awards such as the European Citizen Award and recognition from global organizations such as the Institute for Policy Innovation. The platform has been called a model of digital democracy that is influencing similar efforts in other countries.

The survey also revealed that the platform's staff sees this as another reason for the platform's success. Section 5.3 Examination of Collective Submissions of the Saeima's Rules of Procedure

sets out a specific procedure for reviewing collective petitions from citizens, which obliges the Saeima to review, consider, and respond to a request if 10,000 signatures are collected (Saeimas Kārtības Rullis, n.d.). In this way, the legislation is balanced and "on the one hand, it places the organizational responsibilities of digital civic participation in parliament and municipalities on civil society itself, and on the other hand, both parliament and municipalities are obliged to consider collective submissions very seriously." This is also a certain justification for the high threshold for initiatives to be considered. The expert notes that they call "the digital system of public participation in Latvia 'horizontal'" and believe that this increases its effectiveness.

ManaBalss.lv has had a profound social impact on Latvian society and beyond, demonstrating the powerful role digital platforms can play in fostering civic engagement and influencing policy.

### **Social impact: Miivybir.org (Ukraine)**

Despite its potential to serve as a tool for civic engagement and policy advocacy, Miivybir.org has not succeeded in attracting a substantial user base or effecting meaningful legislative changes. The platform remains largely unknown among Ukrainian citizens, overshadowed by more established alternatives such as the official website for petitions to the President of Ukraine. There have been no notable initiatives or legislative successes attributed to Miivybir.org in the information field. Additionally, factors such as limited language support, outdated design, and a lack of secure login options have hindered user engagement and trust, preventing the platform from achieving its intended impact. Significant improvements are necessary for the platform to effectively fulfill its mission.

### **5.3.2. Comparative Analysis**

When comparing "ManaBalss.lv" (Latvia) and "Miivybir.org" (Ukraine), several notable differences and similarities emerge across policy-procedural, technical, social, and user experience aspects.

Both platforms utilize the same technical foundation, offering similar user experiences, navigation, and functionality. However, despite this shared technical solution, the perceived effectiveness and user satisfaction differ due to contextual and external factors such as the support ecosystem, community engagement, and user trust.

Despite their common simplicity of design, these platforms have different impacts. ManaBalss.lv has deeply integrated into Latvian society, fostering a participatory culture with over 20% of the population engaging with the platform. It has facilitated numerous legislative changes, reflecting its strong societal impact. In contrast, Miivybir.org remains largely unknown and underutilized, with minimal social influence. The presence of a competitive official petition platform Presidential petition site in Ukraine further diminishes its role in fostering civic engagement.

Also, Miivybir.org's reliance on Facebook for login complicates the user experience due to privacy concerns, whereas ManaBalss.lv offers multiple trusted authentication methods, enhancing user convenience and security. This is also a disadvantage given the fact that Ukraine has tools for trusted authorization and other alternative platforms are actively using them. It is undermining user confidence and hampering engagement.

ManaBalss.lv has profoundly impacted Latvian society, with numerous initiatives leading to legislative changes and widespread civic engagement. Its success stories and international acclaim underscore its role in fostering a participatory democracy. In contrast, Miivybir.org's social impact is minimal, with limited user engagement and no significant legislative successes.

Didzis Melkis also notes that one of the reasons why the "sister" platform in Ukraine does not have the same results as ManaBalss.lv is that "the vertical Ukrainian system is overregulated, confusing and inefficient" compared to the one in Latvia, which works due to legislation that takes into account initiatives from the public conditionally on an equal footing with proposals from government officials.

In summary, while both ManaBalss.lv and Miivybir.org aim to promote civic engagement through digital platforms, ManaBalss.lv's robust trust mechanisms, inclusivity, and significant social impact starkly contrast with Miivybir.org's challenges in visibility, trust, and user engagement.

## **5.4. Private companies Delib: NI Direct (Northern Ireland) and Cap Collectif: Le Grand Débat National (France)**

### **5.4.1. NI Direct (Northern Ireland)**

#### **Background**

Delib is a privately held company and leading provider of digital democracy tools that has launched NI Direct, an e-participation platform designed to increase civic engagement and enable citizens to participate in decision-making processes in the Northern Ireland government. NI Direct offers a structured online consultation space that allows citizens to participate in policy-making, provide feedback on government initiatives and discuss public issues. This platform is part of a broader strategy to increase transparency, accountability and responsiveness of government through digital technologies.

The main goal of NI Direct is to facilitate direct communication between the Northern Ireland government and its citizens. The platform aims to increase citizen engagement by creating a user-friendly online portal that encourages citizens to participate in public consultations and policy-making processes. By openly disseminating draft policies and seeking public opinion, the platform increases the transparency of government activities. Public feedback helps government officials make more informed decisions that reflect the needs and opinions of the community. In addition, NI Direct seeks to build trust between the government and the public through open dialogue and visible responses to citizen suggestions.

### **Ease of use**

NI Direct prioritizes ease of use to ensure broad accessibility and engagement. Key features that contribute to usability include intuitive navigation, a robust search tool, and a responsive design optimized for desktop, tablet, and smartphone. The simplified registration process requires minimal information, encouraging participation while maintaining the necessary security measures. In addition, the platform includes a FAQ section and answers to frequently asked questions, as well as customer support options to assist users who encounter difficulties.

### **Accessibility and inclusion**

NI Direct is designed to be inclusive and accessible to all citizens. It includes several features to ensure widespread use. The platform supports multiple languages, catering to the diverse language needs of the Northern Ireland population, thus increasing accessibility for those for whom English is not their first language.

Adhering to web accessibility standards, NI Direct offers features such as text size adjustment, high-contrast modes, and screen reader compatibility, which is important for users with visual impairments or other disabilities. The platform's responsive design ensures efficient

functionality across devices, allowing users to participate in consultations from the device they prefer. In addition, the platform provides clear and concise information, avoiding jargon, so that all users, regardless of their level of technical expertise, can understand and interact with the content.

## **Trust**

Building and maintaining trust is critical to the success of any e-participation platform. NI Direct has several measures in place to ensure a high level of trust among its users. Secure authentication methods, including verification of government-issued IDs, ensure that only genuine participants can engage in consultations, reducing the risk of manipulation or abuse. The platform adheres to strict data protection regulations, including the General Data Protection Regulation (GDPR), ensuring that users' personal information is handled securely and confidentially.

NI Direct also provides clear information on the consultation process, including timelines, procedures and how public input will be used. Users can track the progress of their submissions and see how their feedback influences the decision-making process.

In addition, the platform includes a closed feedback loop where the government provides detailed responses to public suggestions, demonstrating that citizen input is valued and taken into account in policy making.

## **Social impact**

NI Direct has significantly increased civic engagement and contributed to the development of participatory democracy in Northern Ireland. The platform has facilitated consultations on key planning policies, enabling citizens to contribute to local development plans and influence decisions on land use and development priorities, such as the consultation on the draft Belfast City Region Development Plan.

In the area of health and social care, NI Direct gathers public feedback on policies such as the Transforming Care initiative, which promotes a more patient-centered approach to health care. The platform has enabled widespread public participation in environmental consultations, shaping policies aimed at waste reduction, recycling, and environmental sustainability, such as the Northern Ireland Environment Agency's draft waste management strategy.

During the COVID-19 pandemic, NI Direct played a crucial role in facilitating public consultation on emergency measures and recovery plans, ensuring that government actions were in line with the needs and expectations of the public (*Coronavirus (COVID-19) | Nidirect, 2021*). In addition, consultations on education reforms were also facilitated through NI Direct's active involvement, helping to shape policies that better meet the needs of the education community.

Thus, NI Direct is an example of the effective use of digital technologies to strengthen civic engagement and increase transparency, accountability and efficiency in governance. Its inclusive design, robust security measures, and clear communication strategies have made it a valuable tool for promoting participatory democracy in Northern Ireland.

#### **5.4.2. Cap Collectif: Le Grand Débat National (France)**

##### **Background and purpose**

Le Grand Débat National is an unprecedented citizen consultation initiative launched by French President Emmanuel Macron in response to the "yellow vest" protests that began in late 2018. This large-scale debate aimed to address growing public discontent and engage citizens in discussions on critical national issues, including taxation, public spending, democracy, and the environmental transition.

The platform for Le Grand Débat National was developed by Cap Collectif, a French private technology company specializing in participatory democracy tools. Cap Collectif provided the necessary digital infrastructure to facilitate this nationwide dialogue, allowing for various forms of participation, including online submissions, local meetings, and public events. These diverse participation methods were crucial to gathering a wide range of opinions and proposals from citizens across France.

The platform included several interactive modules designed to provide a structured and inclusive consultation process that allowed citizens to vote, argue, share resources and propose new ideas. The aim was to encourage reasoned debate and minimize the influence of any single interest group, emphasizing the quality and diversity of arguments rather than the volume of repetitive contributions. Currently, new proposals are not accepted, but discussions and results can be viewed, and similar platforms are being created for other specific issues.

## **Ease of use**

Le Grand Débat National has been designed with user-friendliness as a core principle to ensure broad public participation. The platform's simple structure and clear organization contributed to ease of use, encouraging more citizens to engage in the national debate. It had an intuitive navigation with clearly defined sections for different projects, each containing specific events and proposals, allowing users to easily navigate and find the information they needed.

Although it should be noted that there was no search function, the logical organization of the content helped users quickly find topics of interest. Users could interact with suggestions in a simple and engaging way; any registered member could create a suggestion, and others could respond using options such as "Agree," "Not sure," and "Disagree." This system allowed for quick and intuitive feedback on different ideas. Additionally, users could track suggestions and receive updates, allowing them to stay up-to-date on developments and discussions.

The platform also allowed users to submit arguments for or against proposals, and each argument could be supported by other users, which promoted a meritocratic approach to vetting ideas and encouraged thoughtful participation.

The responsive design of the platform ensured efficient functionality on desktop, tablet, and mobile devices, allowing users to participate from anywhere and at any time. However, the site did not contain special tools to ensure accessibility, which could limit its use for people with disabilities.

## **Accessibility and inclusion**

Ensuring accessibility and inclusivity was critical for Le Grand Débat National, which aimed to engage a diverse population across France. The responsive design of the platform allowed for access from a variety of devices, including desktops, tablets, and mobile phones, which was crucial for inclusivity, enabling users with different technological preferences and access levels to participate.

Despite this responsive design, the platform lacked specific accessibility tools, such as adjustable text size, high-contrast modes, and compatibility with screen readers.

The platform allowed contributions from a wide range of users through features designed to encourage participation. Users could leave arguments, vote on proposals, and follow topics,

allowing people with different levels of knowledge and interests to fully participate in the discussion. However, the lack of advanced accessibility features may have excluded some segments of the population, which is critical for truly inclusive public participation.

## **Trust**

Building trust was essential to the success of the Great National Debate, ensuring that citizens felt that their contributions were valued and protected. Using FranceConnect for registration provided a secure method of authentication, ensuring that many participants were verified and authentic. However, the option of registering with a password allowed for the possibility of creating fake accounts, which could have undermined trust to some extent. The platform adhered to strict data protection standards, ensuring that users' personal information was handled securely.

## **Closed feedback loop**

Transparency was a key feature, with detailed statistics available for each project, including the number of contributions, votes, and participants. Users were able to track the progress of proposals and see how their input influenced the decision-making process. In addition, the platform provided clear information about the consultation process, including how public input would be used. Reports on the results of the debate were made available, which helped build trust by demonstrating that citizen input was being considered and acted upon. The process of summarizing and analysing the proposals was transparent, and reports were published to demonstrate the diversity of opinions and the impact of citizens' proposals on policy decisions.

## **Social impact**

The national debate had a significant social impact, reflecting a serious attempt by the French government to reconnect with its citizens and restore public trust through enhanced participatory democracy. More than 1.9 million questionnaires were submitted during the debate from 504,172 unique participants. In addition, 19,899 "cahiers de doléances" (books of complaints) were collected in 16,337 municipalities and 10,134 local meetings were held, demonstrating the wide involvement of the public (*Le Grand Débat National*, 2024).

One notable outcome was the identification and resolution of key public concerns, such as tax fairness, efficiency of public spending, and the need to strengthen environmental transition

efforts. The broad participation and diversity of proposals emphasized the French public's desire for more direct involvement in decision-making processes.

This participatory process not only provided the government with a wealth of information, but also confirmed the feasibility of using digital platforms to conduct large-scale public consultations. The national debate also set a precedent for future citizen engagement initiatives in France and possibly in other democratic countries. It has demonstrated how digital tools can be used effectively to gather and analyse public opinion, contributing to more informed and democratic policymaking.

Despite some criticism of the platform's openness and identity verification, the overall success of the initiative has been noted for its ability to mobilize citizens and promote a renewed dialogue between government and the public.

Le Grand Débat National was an unprecedented citizen consultation initiative launched by French President Emmanuel Macron in response to the Yellow Vest protests that began in late 2018. This large-scale debate aimed to address the growing public dissatisfaction and engage citizens in discussing critical national issues, including taxation, public spending, democracy, and ecological transition.

The platform for Le Grand Débat National was developed by Cap Collectif, a French civic tech company specializing in participatory democracy tools. Cap Collectif provided the necessary digital infrastructure to facilitate this nationwide dialogue. Their platform allowed for multiple forms of participation, including online submissions, local meetings, and public events, which were all crucial for collecting a diverse range of opinions and suggestions from citizens across France.

## VI. Conclusion

The aim of this study was to investigate the impact of service design on citizen engagement with e-participation platforms in European democracies. Behind this is a long-term goal to identify, through academic research, the practical aspects of determining how improving usability and interface design can increase user satisfaction and participation in these digital democracy tools. The research puzzle focused on understanding the factors that influence the effectiveness and user engagement of e-participation platforms and providing recommendations for their improvement. The study focused on platforms designed specifically for civic participation in democratic European countries, excluding social media due to their unstructured nature. A maximalist approach of digital democracy was used, focusing on the active participation of citizens in decision-making processes through innovative practices.

The literature review revealed that the issue of service design of civic participation platforms is limited in research, which is why there is a diversity of concepts and a lack of academic background for professionals directly involved in the development and creation of platforms. However, based on the existing research, it was determined that effective service design is crucial to encourage citizen engagement, and the key elements are usability, user experience, and technical functionality.

The methodology includes a comparative case study of eight national e-participation platforms in seven European countries: Estonia, Latvia, Ukraine, Iceland, France, Scotland, and Ireland. All these cases were selected due to the different conditions in which the work and development of the platforms can be studied, including the work of Osale.ee and Rahvaalgatus.ee within the same country of Estonia; the work of Better Iceland and Scottish Parliament cases on the same flexible platform Your Priorities, but taking into account different political and cultural contexts; the work of ManaBalss.lv and Miivybir.org platforms with the same design but different results, as well as the work of two platforms: NI Direct and Le Grand Débat National, developed by private companies Delib and Cap Collectif, respectively. This comparative analysis of different platforms emphasizes the importance of context-specific elements of service design.

The thesis used a comprehensive manual qualitative analysis of technical aspects, user experience, analysis of existing reports, and expert interviews. Based on the factors that are important for engagement, ten criteria were selected and analyzed: Cross-device support,

Complexity of registration, Navigation (search, menu), FAQ, Support, Multiple languages, Accessibility Tools, Trusted Authorization Security policy, Closed-feedback loop.

Based on the results of the analysis, in response to the main research question, it can be argued that service design is not only a factor influencing citizen engagement, but it is essential for creating effective e-participation platforms to make them user-friendly, inclusive and able to encourage wider populations to participate in democratic processes in the digital age actively.

Looking at the overall fulfillment of the criteria that were evaluated, it should be noted that there are a number of aspects that are basic and are followed by most platforms. In particular, in today's world, when most interactions take place via mobile, attention is paid to the availability of platform options for as many devices as possible. In particular, the Rahvaalgatus.ee, Your Priorities, ManaBals.lv, and NI Direct platforms demonstrate good cross-device support, providing ease of use on desktops, tablets, and smartphones.

All platforms generally offer easy registration processes, but a balance must be struck here and even easy registration must be secure, which is the case for only half of the platforms. Rahvaalgatus.ee uses government-issued IDs or MobileIDs for authentication, which adds an extra layer of security.

It is noteworthy that another unifying factor for many platforms is that little attention is paid to such aspects as frequently asked questions (FAQ), support lines, and a closed feedback loop. All these criteria can be called social aspects, because they determine the resources for communication with users, whether it is passive, with answers already prepared or the consequences of the initiative written down, or active through communication by phone or email. Therefore, it can be noted that developers assume that platforms will be understandable and self-sufficient without additional communication, which can be a mistake, in particular, as was the case in the Scottish Parliament, when a separate document was created to educate people about the purpose and results that can be achieved with this tool to improve the use of the platform. However, the comparative analysis shows that while technological and procedural factors are important, the social aspects of platform design, such as creating a trusting and inclusive environment, are equally important.

In a comparative analysis between Rahvaalgatus and Osale.ee, progress can be clearly seen in the aspects of service design. The Rahvaalgatus platform is ahead of Osale.ee in a number of areas, including a clearly defined process for submitting and legalizing offers. Rahvaalgatus

has achieved transparency in that proposals that reach the required threshold of signatures receive the necessary attention and consideration from the government, which inspires trust and engages the use of the platform. The updated tool integrates modern web development practices that support a responsive design that adapts to different devices. The registration system was simplified by using government-issued ID cards for authentication, simplifying the user experience. In addition, the platform was multilingual, targeted at a wide audience, and had an intuitive user interface that made it easy to navigate. Support for multiple languages is also a significant advantage. As such, the Rahvaalgatus platform attracted a more diverse user base, in part due to the improved interface and simplified proposal submission process.

Comparing "Your Priorities: A Better Iceland" and "Your Priorities: Scottish Parliament", both platforms have intuitive user interfaces and mechanisms for submitting ideas, discussing and voting, but they differ significantly in their interaction with government agencies and their impact on citizen engagement. While service design elements such as ease of navigation, multilingual support, and responsive design are crucial, they face limitations due to the lack of advanced search functions, comprehensive authentication processes, and specific accessibility features. "A Better Iceland" emphasizes grassroots initiatives and direct participation in local and national policy-making, while the Scottish Parliament offers a more formalized path for public ideas to influence legislative action. In this case, in addition to service design, interaction with government agencies and the promotion of citizen engagement play a more important role in the overall effectiveness of the platforms and their social impact.

When comparing ManaBalss.lv (Latvia) and Miivybir.org (Ukraine), one can find notable differences and similarities in the political procedural, technical, social, and user aspects. Both platforms have a similar technical foundation that provides comparable user experience and functionality. Still, contextual factors such as support ecosystems, public engagement, and user trust lead to different levels of perceived effectiveness and user satisfaction. ManaBalss.lv has successfully integrated into Latvian society, fostering a participatory culture in which more than 20% of the population uses the platform and contributing to numerous legislative changes. On the other hand, Miivybir.org remains largely unknown and underutilized in Ukraine, with minimal social impact. In addition, Miivybir.org's reliance on Facebook for login raises privacy concerns, while ManaBalss.lv offers several strong authentication methods, increasing user convenience and security. This difference in trust and user engagement is further exacerbated by the over-regulated and inefficient nature of the Ukrainian system compared to Latvia's more

inclusive legislative approach, which requires initiatives with 10,000 signatures to be considered by the Saeima. Thus, while both platforms aim to promote civic engagement, ManaBalss.lv's robust trust mechanisms, inclusiveness, and significant social impact stand in stark contrast to Miivybir.org's challenges in terms of visibility, trust, and user engagement.

Both NI Direct and Le Grand Débat National are platforms that effectively use digital technologies to enhance civic engagement and participatory democracy. NI Direct is characterized by accessibility, constant interaction, and robust security measures, making it a valuable tool for ongoing public consultation. In contrast, Le Grand Débat National stands out for its large-scale impact and comprehensive approach to addressing specific national issues despite certain limitations in accessibility and trust mechanisms. While NI Direct offers a sustainable model for ongoing civic engagement, Le Grand Débat National emphasizes the potential of digital platforms to conduct large-scale public consultations on specific issues.

The platforms NI Direct (Northern Ireland) by Delib and Le Grand Débat National (France) by Cap Collectif should also be contrasted with all the other platforms in the analysis because they are the only two platforms that are private, while all the others are either public or run by non-profit organizations. It's an interesting overview to understand whether the work on platforms as a business that needs to be monetized and scaled is due to greater engagement and differences in service design. Based on the results of the analysis, we can say that private platforms such as NI Direct and Le Grand Débat National tend to perform better in terms of cross-device support, security, and user support than many public and non-profit platforms. They tend to have more robust systems for user authentication, data protection, and feedback. Other strengths include a robust system of frequently asked questions and support options, strong security policies and strong authorization, and effective closed feedback loops. For example, Osale.ee lacks modern features and comprehensive support tools, the Your Priorities platform needs to improve its navigation, accessibility tools, and authentication processes, while both ManaBalss.lv and Miivybir.org lack reliable feedback mechanisms and advanced accessibility features.

However, certain areas, such as navigation and support for different devices on Le Grand Débat National, still need to be improved. Non-profit and public platforms such as Rahvaalgatus.ee also perform well, especially in terms of user engagement and inclusivity, but may lack the comprehensive support seen on private platforms. The study highlights several best practices, including the integration of responsive design, multilingual support, secure authentication

processes, and a collaborative system. However, challenges remain, such as the need for more advanced accessibility features and better mechanisms to ensure the authenticity of user contributions.

By examining the design and functionality of these platforms, the study aims to identify ways to make them more accessible, user-friendly, and attractive to different segments of the population, thereby increasing their effectiveness and promoting democracy. The ultimate goal is to provide recommendations on how to improve the design and functionality of e-participation platforms to promote greater citizen engagement in political processes and decision-making, thus contributing to the development of democracy and governance in Europe.

The following recommendations can be used to develop civic participation platforms:

- Improve user experience - prioritize intuitive design and clear navigation to make platforms accessible to users with different levels of digital literacy.
- Ensure inclusivity to implement comprehensive accessibility features and multilingual support to meet the needs of different user groups.
- Build trust by implementing robust security and registration measures and transparent feedback mechanisms to build trust and credibility.
- Build partnerships with the government to ensure a closed feedback loop on the review of proposed initiatives.

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