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BEYOND E-GOVERNMENT: A FRAMEWORK FOR E-DEMOCRACY

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ABSTRACT
As our civilization more and more moves towards an e-society, a society where the use of information and communication technologies (ICT) is increasingly accepted and integrated in all aspects of daily life, e-government may be evolving into e-democracy. Whereas traditionally e-government has been mainly providing information and services to people and organizations over the internet, with the decision-making remaining chiefly on the government side, e-democracy allows the general population to be included in democratic processes (e-inclusion) and participate in policy making (e-participation). This paper provides a framework for e-democracy while exploring the outlook for e-democracy in our increasingly digitalized world.

Keywords

INTRODUCTION
E-Democracy is defined as the use of information and communication technologies (ICT) in support of democratic decision-making processes (Macintosh 2004; Päivärinta and Sæbø 2006). E-Democracy can be viewed as a broadening or an extension of the concept of e-government, which has been around for several decades. But in contrast to e-government, the focus of e-democracy has been providing the public with information and services through the internet while keeping the decision-making authority firmly on the government side.

While community involvement is central to socio-economic development, getting citizens to actively participate in public affairs at national, regional and local levels has been an on-going challenge facing many governments (Musiał-Karg 2012). Socio-economic development affects peoples income, wealth, education, and occupation, as well as social liberty, i.e., the freedom from excessive societal constraints that may keep individuals from achieving their personal aspirations (Roztocki and Weistroffer 2016). Digital means can make community involvement by ordinary people easier and less time consuming, as people may participate remotely, i.e., e-participate, from any location, including the home.

Though a number of published papers discuss select aspects of e-democracy, only few of them deal with the complex conceptualization of e-democracy and its components, as they relate to the use of ICT. Therefore, the objective of this paper is to propose an initial framework for e-democracy based on the major principle of democracy, the three-way separation of powers, and the all-embracing conception of community involvement.

In this paper, after introducing the theoretical foundation, we review some existing models of e-democracy, before proposing our own framework with its four major aspects of e-democracy, viz. e-government, e-parliament, e-justice, and most importantly e-participation with its many forms. We explore the extent to which these facets of e-democracy have been or can be realized. Our sources for this are mainly currently available literature.

THEORETICAL FOUNDATION
Fundamental to democracy is community involvement and participation, and thus e-democracy requires e-participation. Besides giving people a voice in public pursuits, e-participation also may lead to better decisions, as these will be based on a multitude of opinions and a collective of knowledge, similar to crowdsourcing. Crowdsourcing is defined as engaging a large number of individuals in recognizing, defining and solving a specific problem (Marjanovic and Roz托cki 2013), taking advantage of collective intelligence, also called the wisdom of crowds (Surowiecki 2005). This theory presumes that when solving complex problems, a large number of individuals, i.e., the crowd, exceeds the performance of individual experts, since
it possesses aggregate knowledge and experience (Rauhut and Lorenz 2011). ICT makes connecting and engaging a large number of individuals possible, and thus facilitates e-participation by the community, i.e., the crowd.

A specific application of crowdsourcing already widely adopted is participatory budgeting (Bernardino and Santos 2020). In participatory budgeting, the local authorities solicit the residents, i.e., the crowd, to produce ideas on how to best spend an available amount of money in order to improve their neighborhood.

CONCEPTS OF E-DEMOCRACY

e-Democracy represents a wide variety of uses of ICT in support of democratic interactions, and includes many levels and natures of involvement by the public (Lindner and Aichholzer 2020). Coleman and Norris (2005) assert that e-democracy includes both top-down and bottom-up e-participation initiatives. Top-down e-participation is started, sponsored, and controlled by governments while bottom-up e-participation is initiated and organized by citizens (Lindner and Aichholzer 2020). Surprisingly, in the existing literature there are not many well-known models or frameworks of e-democracy. Perhaps the most comprehensive and frequently used framework of e-democracy is the one proposed by Kneuer (2016).

The e-democracy framework proposed by Kneuer (2016) is based on three pillars: free and equal access to ICT, e-participation, and e-government. The first pillar relates to the availability of appropriate technical infrastructure and guaranteed access to ICT, including internet freedom and uncensored use of social media. In essence, this first pillar of e-democracy proposed by Kneuer (2016) postulates e-inclusion. The second pillar, e-participation, is based on the concept proposed by OECD (2003), flowing in two directions, top-down (from government to citizen) and bottom-up (from citizen to government), and incorporates four levels of citizen engagement: information, dialogue, monitoring, and decision-making. The third and final pillar is e-government, limited to a top-down flow that provides online tools to inform citizens and deliver public services. As Kneuer (2016) observed, e-government can reduce costs, increase efficiency and transparency of public administration, minimize corruption, while increasing overall trust and creating a positive attitude toward government.

In follow-up work to Kneuer (2016), Kneuer and Datts (2020) expand the earlier framework of e-democracy to include a spatial dimension, looking at territorial, political, and affective citizenship. Territorial citizenship depends on the tier of e-democracy, i.e., local, national, or transnational or global. Political citizenship relates to level of interest in the issues to be decided, and affective citizenship is about trust in self-efficacy, i.e., being able to make a difference.

Kapsa (2021) expanded on the characteristics of e-participation in Kneuer (2016) by analyzing e-participation through the lenses of availability (or access), adjustment (or usability), activeness (or interaction), and effectiveness. None of these models or conceptions include the functions of the legislative and judiciary branches of government or democracy. Thus, in our work we build on the Kneuer (2016) concept of e-democracy by adding two additional elements: e-parliament and e-justice.

E-DEMOCRACY FRAMEWORK

e-Democracy

Based on Roztokci et al. (2022a) and Macintosh (2004) we broadly define e-democracy as the utilization of ICT in democratic decision-making processes. Päivärinta and Sebo (2006) state that the concept of e-democracy refers to the use of ICT in political debates and decision-making processes, complementing or contrasting traditional means of communication, such as face-to-face interaction or one-way mass media. We view e-democracy as a broader concept than e-government, encompassing e-government as well as e-parliament, e-justice, and most importantly e-participation. Furthermore, in order to make e-democracy accessible to all population groups, we consider e-inclusion to be an integral part of e-democracy.

e-Inclusion

Digital inclusion, or e-inclusion, refers to the concept that all individuals and communities, including the most disadvantaged, have access to using ICT, a necessary prerequisite for e-participation. The unequal access to using ICT by different population groups, separated geographically or by socio-economic disparities, is generally referred to as the digital divide. Reasons suggested for the digital divide are economic barriers that prevent people from obtaining current technologies, physical or mental disabilities, lack of exposure to digital media, and differences in education and training. Policies for e-inclusion have developed significantly over the past decades, from a niche approach with the focus on disability and public support for technology research, to now addressing the role of ICT for any group at risk of socio-economic exclusion (Timmers 2008). The European Commission, in agreement with the European Parliament and European Council in 2022 issued the “European Declaration on Digital Rights and Principles for the Digital Decade” shaped around: (1) putting people and their rights at the center of the digital transformation; (2) supporting solidarity and inclusion; (3) ensuring freedom of choice online; (4) fostering participation in the digital public space (5) increasing safety, security and empowerment of individuals; and (6) promoting the sustainability of the digital future (European Commission 2022). Also in 2022, the US Federal Communications Commission
(FCC) started an initiative meant to ensure that every person in the United States has equal access to high-quality and affordable broadband internet service (Federal Communications Commission 2022).

Figure 1 summarizes our framework of e-democracy, with the three separate branches of democratic government, i.e., the executive, legislative, and judiciary functions, represented by three corners, e-government, e-parliament, and e-justice. On top of it all we put e-participation, as e-participation permeates all of e-democracy. In the following we will discuss each of these four aspects in more detail, as well as sub-concepts to these primary concepts.

![E-Democracy Framework](image)

**Figure 1. E-Democracy Framework**

### e-Government

The term e-government emerged in the late 1990s (Grönlund and Horan 2005) and generally describes a variety of interactions between public authorities on one side, and individual residents or businesses and other non-governmental entities on the other side, using ICT (Reitz 2006). It mostly refers to communal or national government information and services being made available through the internet via web browsers or mobile apps. Roztocki et al. (2022a) define e-government as the utilization of ICT by central, regional, and local authorities, to provide information and various services to the public.

### e-Information

The term e-information may simply describe any information stored or communicated in electronic form. However in the context of e-democracy, e-information refers to information made available by local or national governments to residents via electronic means. One of the primary functions of e-government is e-information, and the 2020 UN E-Government Survey (United Nations 2020) defines it as “enabling participation by providing citizens with public information and access to information without or upon demand.” Roztocki et al. (2022a) define e-information as the utilization of websites, web forums, e-mail lists, and newsgroups to distribute government data and information about regulations and administrative procedures. Examples of information provided may include new business regulations, announcements of public events, and general updates. Particularly during crisis situations, like the COVID-19 pandemic, this e-information has taken on a very important role, keeping the populace informed on government measures, available help, and general developments.

### e-Services

In general, e-services are any interactive services that are delivered using advanced telecommunications, information, and multimedia technologies, including services provided by private businesses as well as government agencies. In the context of e-democracy, we use the definition of Roztocki et al. (2022a), that is, e-services are interactive government services provided over the internet. e-Services are the other conventional focus of e-government. Examples of e-services include renewal of driver’s licenses, payment of taxes, and applications for business permits. Most current e-government websites allow at least some form of interaction. The services provided, and the quality of the user interaction experiences vary but have generally improved and are expected to continue to improve over time. The COVID-19 pandemic has had a catalytic effect on user acceptance and utilization of these services, as lockdowns prevented access to many services through conventional channels.

### e-Parliament

Olasina and Mutula (2015) define e-parliament as the use of ICT in the performance of legislative functions by legislators and citizens. The 2012 World e-Parliament Report (United Nations 2012) defines e-parliament as a legislature that is empowered to be more open, transparent, and accountable through ICT. It also states that an e-parliament is an efficient organization where stakeholders use ICT for the primary functions of lawmaking, representation, and oversight. We use the definition of Roztocki et al. (2022a), which simply states that e-parliament is the utilization of ICT in the performance of legislative functions.

As stated in the 2020 World e-Parliament Report (Inter-Parliamentary Union 2021, p. 6), “the COVID-19 pandemic has crystalized the importance of ICT.” Parliaments are looking at more holistic and integrated digital strategies and embracing the
full potential of a digital-first approach. Some key findings in the report are that: (1) by the end of 2020, 65% of the parliaments surveyed had held virtual or hybrid committee meetings and 33% a virtual or hybrid plenary meeting; (2) the way parliaments work has changed, using remote working practices and greater reliance on cloud-based tools and digital solutions; (3) though modernizing programs for parliaments have long existed, parliaments now move more quickly with solutions once considered long-term prospects only; (4) regulations have evolved to support remote working and flexible work arrangements, strengthening institutional resilience; (5) parliaments are gaining confidence in processes and technology through more user involvement, user-centered solutions, and better training and support; (6) parliaments have become more agile, with iterative solutions and new tools and practices, quickly addressing emerging problems.

**e-Justice**

Cyberjustice, or e-justice, is the incorporation of ICT into the justice system. This may refer to offering court services electronically or using ICT within courtrooms (Benyekhlef and Gélinas 2005). An important goal of e-justice is improved access to justice by reducing costs and reducing the burden on the judges and the court system. ICT and e-justice have been incorporated into the legal systems of many jurisdictions worldwide. The European Union, for example has created the e-Justice Portal¹, which allows access to legislation case law and legal information. The United States of America has implemented several electronic courtrooms, for example, the McGlothlin Courtroom, located at the William and Mary College of Law², which has technology to allow publishing of court transcripts online in real time, and uses holographic evidence display and immersive technology, i.e., technology that immerses the user inside a virtual reality (Lederer 2005).

**e-Participation**

According to the 2020 UN E-Government Survey (United Nations 2020), e-participation is the "process of engaging citizens through ICT in policy, decision-making, and service design and delivery in order to make it participatory, inclusive, and deliberative." We adopt the shorter definition of Roztocki et al. (2022a), which states that e-participation is citizens engagement in the discourse with politicians and governments using ICT. An e-participation index (EPI) was established as a supplement to the UN E-Government Survey and reflects the participation mechanisms in place in a country as compared to all other countries (UN E-Government Knowledgebase 2022). This EPI is composed of three core components, e-information, e-consultation, and e-decision-making. The first component, e-information, enables participation by providing constituents with public information. The second component, e-consultation, enables constituents to provide input to and deliberate on public participation. The third component, e-decision-making, empowers constituents to partner with the government in the design of policies and production of services.

An example of e-participation that has been implemented in different forms in many areas worldwide is participatory budgeting. Though participatory budgeting can also be put into operation by conventional means, ICT makes the process more accessible and allows for wider participation. In Poland, for example, in many cities and boroughs participatory budgeting is done once a year and the general procedure consists of five major steps: information campaign, submission of project proposals, evaluation of submitted proposals, voting, and announcing of results and implementation of the projects. e-Participation can take on multiple forms, including e-voting, e-referendum, epetition, e-consultation, e-deliberation, and e-lobbying.

**e-Voting**

An obvious form of e-participation is e-voting, which generally refers to any type of voting using electronic means (Svensson and Leenes 2003). It may involve stand-alone electronic voting machines that record and count votes in a specific public site, or it may utilize personal computers or mobile devices that are connected to the internet, allowing voting to take place remotely, from any location. E-voting may be used in general elections, such as for president of a country, or a legislative representative, or it may be on specific issues within smaller regions and groups.

**e-Referendum**

A traditional referendum is direct participation by citizens in political decision-making, where votes are binding for the final outcomes (Musial-Karg 2012). Generally, referenda are not widely used in most countries or localities. The perhaps best-known example of a country where referenda are customary though, is Switzerland, where they have been common since 1848 (Rappard 1912). Because the use of traditional referenda in the political process has been limited, the use of e-referenda, i.e., the direct voting on a particular proposal or certain matter using ICT, is also limited. Switzerland seems to be leading in this transformation, as e-referenda were introduced there in 2000 (Musial-Karg 2012). One of the goals for introducing the option

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¹ https://e-justice.europa.eu/
² https://www.legaltechcenter.net/about-us/mcglothlin-courtroom/
for e-referenda was the conceivable inclusion of those segments of the population that did not commonly participate in a traditional referendum, namely disabled people and Swiss citizens living abroad (Musiał-Karg 2012). As reported by the same research, the introduction of e-referenda did attract participants who had never partaken in traditional referenda. Thus, e-referenda appear to be effective in reducing social exclusion from democratic decision-making.

e-Petition

To involve citizens in democratic decision-making processes many governments established specific e-petitioning platforms or electronic systems. These platforms or systems are treated as channels to petition their governments to make specific decisions or take specific actions (Luna-Reyes 2017). Using ICT, usually through designated websites, e-petitioning allows citizens to raise issues and request from their government specific actions. Ultimately, the initiative to submit an e-petition on a given issue rests with the citizens, thus it is a bottom-up form of e-participation. An example of an e-petition platforms was the "We the People" government website created by the Obama administration and used during his presidency.

e-Consultation

In contrast to e-petitioning, e-consultation is a form of top-down e-participation. In e-consultation, the public is asked for an opinion about a specific matter by the government, using ICT. Governments use e-consultations as a tool to ask citizens for their comments and suggestions on policy options or pending legislations (Luna-Reyes 2017). E-consultations aim to increase the legitimacy of policies and laws and improve their design, by soliciting opinions from citizens.

e-Deliberation

E-deliberation enables various groups of interested individuals to engage in political discussions, voice opinions, make suggestions, and communicate with political representatives (Bendor et al. 2012; Rose and Sæbø 2010). Several platforms have been established to build dialogue between politicians and citizens as, for example, Demokrattiportet, created in 2003 in Norway (Rose and Sæbø 2010). Facebook, a social medium, has also been used for e-deliberation, as for example to discuss sustainable transportation in Vancouver (Bendor et al. 2012). These platforms are used to assess social attitudes, needs, and expectations, and simultaneously offers direct contact with politicians, who can respond to particular comments or requests.

e-Lobbying

Lobbying is an endeavor to persuade politicians and government officials to support a specific policy or action. To this extent, we define e-lobbying as a wide range of activities carried out using ICT to influence politicians and government officials to make specific decisions (Aidemark 2003; Roztocki et al. 2022b). e-Lobbying is usually a well-organized procedure initiated by special interest groups or parties to persuade legislators or decision-makers in favor of or against a given policy, while e-petitioning is a less formal process and often raises completely new issues. Both are considered bottom-up forms of e-participation.

CONCLUSION

A multi-facet e-democracy framework including e-participation, e-government, e-justice, and e-parliament is proposed, with e-participation being the most important aspect. As compared to earlier, related work (Roztocki et al. 2022a; Roztocki et al. 2022b), this paper makes two significant contributions. One, we justified e-participation theoretically by showing that it can be interpreted as a form of crowdsourcing, making use of the aggregate knowledge of the public to derive better outcomes. Two, we added the concept of e-justice. In the present framework, e-government, e-parliament, and e-justice are included as three corners of our framework, as these concepts correspond to the traditional branches of democratic government. We also tried to give an impression as to what extent the various concepts of e-democracy have already been implemented or are in the process of being implemented. Our discussion and our framework may serve as a basis for further research into e-democracy concepts, expanding on previous e-democracy models.

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