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Georg Aichholzer
Doris Allhutter

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Georg Aichholzer and Doris Allhutter

Institute of Technology Assessment, Austrian Academy of Sciences, Vienna

Keywords

Civic participation, democracy, e-participation, evaluation, impact assessment

Abstract

With the diffusion of the World Wide Web expectations were raised that electronic tools may stimulate citizens' participation in political decision-making. Across Europe many e-participation projects have been funded over the last years but seldom have attempts been made to assess the effects. An OECD report on Evaluating Public Participation in Policy Making concluded that there is an "evaluation gap" and still empirical results differ widely (OECD 2005). A key question for an evaluation of democracy effects is: To what extent does e-participation strengthen civic engagement and democratic governance? Or more specific, under which conditions and in which forms can online political participation be conducive to normative democratic goals?

Starting from a conceptual foundation of online political participation, this paper develops a systematic overview of different levels of engagement (e.g., information, consultation, participation) and categories of e-participation (e.g., e-petitioning, e-consultation, e-deliberation, e-polling, e-voting). After an outline of common hypotheses in research on the democratic impacts of e-participation, it provides a focused literature review of respective empirical results. By disclosing how the diverse approaches and criteria guiding this research lead to inconclusive findings, the paper shows the gaps and open questions to be worked on in further studies. In order to arrive at a more encompassing assessment of the democracy effects of e-participation, the final chapter suggests future research directions and refers to some fruitful starting points.

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I Introduction

An often stated recommendation against declining voter turnout, increasing disengagement of citizens from politics and political organizations as well as increasing distrust in political institutions and politicians has been a strengthening of elements of direct participation of citizens. In several countries of Europe recent changes in legislation and institutional procedures have allowed for various forms of referenda, petitions, consultation, and complaint procedures to amend the traditional structure of representative democracy. Moreover, with the diffusion of the World Wide Web expectations were raised that electronic tools may facilitate citizen participation and stimulate increased engagement in political decision-making. The European Commission's i2010 eGovernment Action Plan had pointed out strengthening participation and democratic decision-making and tools for effective public debate and participation in democratic decision-making as a priority (European Commission 2006). In line with these objectives, the European eGovernment Plan 2011-2015 emphasizes user empowerment, improvement of transparency and involvement of citizens and businesses in policy-making processes. It also states that actions should be built on projects on eParticipation (European Commission 2010). Likewise supra-national organisations such as the OECD (2003) and the Council of Europe (2009) ascribe new potentials to 'e-democracy', which is the buzzword denoting the idea of supporting democratic processes by information and communication technologies (ICTs). The assumption is that the widespread use of ICTs will stimulate greater citizen engagement in policy-making and also enable the establishment of new forms of social organisation and governance, which eventually would lead to better policy results and social cohesion.

The scholarly debate on the role of technology for politics has already a long history, yet the significance of emerging forms of ICTs for a reshaping of politics and democratic processes is acknowledged less unanimously and with less certainty regarding the impacts. For instance, Hoff et al. (2000, 1) claim that ICTs do play an important role in restructuring and redefining fundamental relations within the political systems of the Western countries but demand evidence on the nature of change to be gathered by thorough empirical research. This would be highly necessary to correct existing flaws of the debate on electronic democracy, one of them being a good deal of normative speculation; other flaws concern the long time U.S.-centric view and the focus on technology without due regard of theoretical concepts of democracy and of the indicators referred to in democracy research.

The use of various sorts of ICTs in political processes has been a field of experimentation and research already since decades, especially since the early 1970ies in the USA. In the early debate, different terms such as "teledemocracy" and "cyberdemocracy" often stood for alternative normative models of democracy whereas currently the term "e-democracy" is used as an umbrella term. The spread of the Internet and related networked tools developed since the 1990ies reinvigorated the great hopes for a revitalization of Western democracies for both bottom-up and top-down initiatives. The term "netizen" created from a combination of *Internet* and *citizen* became a symbol, signifying a new form of practicing citizenship and, at the same time reshaping the very concept of citizenship (see e.g., Ekelin 2007, Mossberger et al, 2008, Allhutter 2009). According to Hurwitz (1999, 655) the notion coined in 1994 "refers to an Internet user and suggests that as the Internet became a center of power, it would confer a new socio-political identity on its users, as the city did for citizens". However, the great visions of cyberspace as an "electronic frontier" of free thought and egalitarian associational activities and as an "electronic commons" of netizens deliberating on issues of public concern, contributing to the decision-making of responsive governments are challenged by various counterarguments: the lack of democratic distribution of access; the likelihood of "flame wars" and fragmentation instead of production of consolidated public opinions; pressures

such as liabilities of service providers and surveillance capabilities which limit the use of online networks for political purposes; and consumer sovereignty getting a more important value than netizenship with the growing commercialization of cyberspace (ibid., 655pp.).

These divergent views on potentials and real perspectives of ICTs for political practice and processes suggest taking a look at empirical evidence on ways of employing these technologies for political participation and on their possible impacts. E-democracy is a too broad and vague analytical concept for this task. Electronic participation or e-participation seems to be a more appropriate concept to start with as it allows differentiating among distinct categories and functions of ICTs in political participation (see chapter 2).

Across Europe many e-participation projects have been funded over the last years but seldom have attempts been made to assess the effects and impacts. An OECD report on Evaluating Public Participation in Policy Making (2005) concluded that the “evaluation of public participation is still in its infancy”. Also within the scientific community “the evaluation challenge” (Rose/Sanford 2007) has been identified as one of the priorities in the field of e-participation. Key questions for an evaluation of democracy effects are: How does e-participation affect political processes and political institutions? To what extent does e-participation strengthen democracy and democratic governance? Or more specific, under which conditions and in which forms can online political participation be conducive to normative democratic goals? Crucial indicators for the quality of democracy and civic participation are, for example, transparency and legitimacy of political procedures, openness and equal participation.¹

The paper aims to contribute to this challenge of assessing the use of ICT-supported forms of public participation in policy-making and its impact on democracy. It includes the following steps: Starting from a conceptual foundation of online political participation in chapter 2 it develops a systematic overview of different levels of engagement (e.g. information, consultation, participation) and categories of e-participation (e.g. e-petitioning, e-consultation, e-deliberation, e-polling, e-voting). A subsequent review of key hypotheses on the relationship between changes in ICTs and democratic processes then assists a review of empirical results regarding specific effects on democracy in chapter 3. The comparison of empirical results suggests a demand for more systematic approaches to evaluating e-participation. To sum up, the final chapter provides a brief assessment of the current state of evaluation frameworks and points out future challenges for assessing effects on democracy.

¹ For discussions on indicators of quality of democracy and public participation see, for example, Abromeit (2001, 2004), Lauth et al. (2000), Lijphart (1997), Morlino (2004), Schaller (2002).

2 E-participation as an emerging participatory form in civil society

Some conceptual clarifications seem appropriate in order to place e-participation into the context of discussions on political participation in general. Concepts of political participation typically focus on different ways and levels of public engagement in the political process. A number of criteria is used to differentiate the variety of political participation activities, major categories are

- the level of participation or civic empowerment (e.g., Arnstein 1969²),
- the type of engagement, e.g. individual vs. collective activities (Pattie/Seyd 2003) or elite-directed vs. elite-challenging action (Walter/Rosenberger 2007),
- the type of political process, e.g. formal vs. informal procedures; and
- the stage in the policy cycle.

Referring to several of the above mentioned aspects, Rowe and Frewer (2005, 253) define public participation as “the practice of involving members of the public in the agenda-setting, decision-making, and policy-forming activities of organizations/institutions responsible for policy development”. Using the direction of flow of information between participants and policy-makers as a criterion, allows the authors to differentiate this general notion into three types of public engagement: communication, consultation, and participation. A very similar three-step concept of levels of participation has been suggested by the OECD (2001, 23), termed information, consultation, active participation, also reflecting different degrees of civic influence on political decision-making.

2.1 Categories of e-participation

Based on these general categorizations of civic participation, there are various definitions of e-participation which determine the scope of relevant participatory practices. The following two are representative for a largely common core understanding and included normative flavour: According to Sæbø et al. (2008, 400) “E-participation involves the extension and transformation of participation in societal democratic and consultative processes, mediated by information and communication technologies (ICTs), primarily the Internet. It aims to support active citizenship”.³

In this view e-participation is primarily understood as technology-mediated, politically oriented interaction between, on the one hand, the spheres of civil society and formal politics as well as administration, and on the other hand, within civil society. While the focus of civic participation is on citizens, civic organizations and businesses are also relevant. A second definition of e-participation offered by the research network DEMO-net⁴ makes this explicit, including a normative element oriented at enhancing participation: “eParticipation describes efforts to broaden and deepen

² Arnstein’s “ladder of participation” distinguishes eight steps making up three levels of empowerment: *Non-participation*: (1) Manipulation, (2) Therapy; *Tokenism*: (3) Informing, (4) Consultation, (5) Placation; *Citizen power*: (6) Partnership, (7) Delegated Power, (8) Citizen Control.

³ The same definition or a similar wording is found in Rose/Sanford (2007) and Sanford/Rose (2007).

⁴ DEMO-net was a research collaboration in the form of a European Network of Excellence (of which the authors were part): It was funded under the European Commission’s Sixth Framework Programme: Information Society Technologies IST (see Website <http://www.demo-net.org/>).

political participation by enabling citizens to connect with one another and with their elected representatives and governments” (DEMO-net 2007, 9). The network has identified relevant e-participation tools and areas of application for e-participation⁵ which lay the basis for a systematic categorization of e-participation activities with reference to relevant criteria in research on political participation.

Differentiating participation into distinct levels – information, consultation, active participation – as suggested by the OECD (2001, 23) is echoed in a similar categorization of e-participation which at the same time correspond to different roles of ICTs: “e-enabling” refers to the function of technologies to provide access to relevant and useful information, “e-engaging” evokes the vision that a wider audience can be consulted and involved into deliberative processes via networked technologies, and “e-empowering” is understood to support active participation of citizens and their co-determination of political agendas (Macintosh 2003; Macintosh et al. 2004). Thus, e-participation covers civic engagement both within and outside the formal political system.

However, such typologies remain abstract without relating them to the multitude of concrete participatory practices which exist both in the offline and online participation domains alike. Sæbø et al. (2008) who understand e-participation as a technology-mediated social practice list a number of key e-participation activities including: e-voting, online political discourse (deliberation), online decision-making, e-activism, e-consultation, e-campaigning, e-petitioning. This list partially overlaps with DEMO-net’s “e-participation areas” (see appendix) which also represent social and political practices, but gaps and inconsistencies in each leave both lists inconclusive. Thus, for a beginning we suggest a more pragmatic approach based on the different categories of activities which are counted as e-participation tools by DEMO-net:

The variety of electronically supported ways of political participation can be grouped by applying two key criteria – the type of engagement and the role of ICT linked to the level of participation. As depicted in table 1, while the first (horizontal) criterion focuses on individualistic versus collective forms of civic engagement, the second attempts to differentiate between basic functions of ICT and degrees of engagement in decision-making: 1) Individualistic and collective civic engagement have been identified as empirically distinct groupings by Pattie and Seyd (2003). In this study the notion of “individualistic activism” includes ethical consumption, donations, petition-signing, fund-raising, voting in local elections, wearing a campaign badge, whereas collective activism comprises participation in public demonstrations, attending political meetings, illegal protest and propensity to form a group of like-minded people.⁶ This distinction tries to differentiate between forms of participation that exclude or include directly engaging with other participants. The distinctness of these two forms is only partially given, since activities such as fund raising could also be done collectively whereas illegal protest can as well be an individual strategy. With regard to the use of electronic media for participatory activities, this distinction gets even more blurred. Nevertheless, to some extent it makes sense to refer to these not necessarily mutually exclusive types in order to be able to systematize electronic tools and applications enabling different levels of interactivity between participants. The vertical grouping – “e-enabling”, “e-engaging”, and “e-empowering” – shows three categories of ICT-supported levels of participation and represents a ladder of ascending citizen empowerment.

It has to be admitted, though, that not in all cases it is possible to assign these technologically mediated e-participation practices to distinct categories unequivocally. Some are more malleable than others and depend on ways of deployment. Nevertheless, the table clearly shows that – apart from

⁵ See tables 2 to 4 in the appendix.

⁶ A third type in this study refers to contact activism (contact politicians, write to local media, contact a solicitor, contact an organisation) which need not be a separate category in e-participation.

the fact that e-participation tools exist for all categories – individualistic engagement practices are somewhat better served and that active participation type activities are less manifold than the information and consultation type practices.

Table 1: *E-participation tools by type of engagement and role of ICT/level of participation*

TYPES OF ENGAGEMENT		
ROLE OF ICT/ LEVEL OF PARTICIPATION	individualistic activism	collective activism
<i>e-enabling (information)</i>	<ul style="list-style-type: none"> • e-participation chat rooms • decision-making games • webcasts, podcasts, wikis, blogs, GIS tools, ListServes, FAQs, alert services, online newsletters 	<ul style="list-style-type: none"> • e-participation chat rooms • virtual communities • decision-making games • groupware tools • e-campaigning
<i>e-engaging (consultation)</i>	<ul style="list-style-type: none"> • e-consultation • e-participation discussion forum/board • e-deliberative polling • quick polls, surveys • suggestion tools for (formal) planning procedures 	<ul style="list-style-type: none"> • e-panels • virtual communities • e-campaigning
<i>e-empowering (active participation)</i>	<ul style="list-style-type: none"> • e-petitioning • e-voting 	<ul style="list-style-type: none"> • e-petitioning • virtual communities • e-campaigning

Of course one could also ask how different e-participation activities relate to different models of e-democracy. Some frameworks offer such e-democracy constructs with different normative contents. A classical example is Bellamy's (2000, 33pp.) four models of information-age democracy comprising the consumer democratic, demo-elitist, neo-republican and cyber democratic models. Furthermore, Päivärinta and Sæbø (2006) have proposed a different set of e-democracy models which they term liberal, deliberative, partisan and direct democracy. The advantage of these models is that they are based on differences regarding two fundamental characteristics (derived from Dalton's polyarchy concept), i.e. citizens' inclusion in decisions and control of the agenda. Päivärinta and Sæbø's typology allows them to exemplify how e-participation tools (e.g. different forms of discussion fora) are employed and work under different democracy models.

2.2 ***New opportunities for e-participation and expected effects***

Potentials of technological advances in ICT are cornerstones of the e-democracy debate. In particular the potentials of the Internet such as fast access to information and communication on a global scale, high flexibility with respect to time and location of access, rapid response time, low transaction costs, and non-hierarchical structure are expected to open up extended avenues of communication and interaction which also offer new opportunities for political participation. However, much of the literature on e-democracy and e-participation is flawed by a technology-determinist perspective which connects technological advances directly to changes in political participation

and improvements of democracy. As Weare (2002, 679) points out, the debate between the “mobilization hypothesis” and the “reinforcement politics hypothesis” echoes to a large extent the contrasting perspectives of technological and social determinism. While the mobilization effects towards increased political participation tend to be expected as direct consequences of technological innovations, advocates of a social shaping perspective are inclined to emphasize the persistence of existing social and political structures. Stanley and Weare (2004, 506) suggest that the reinforcement and mobilization hypotheses establish a false dichotomy, whereas it is more plausible to view these effects as not mutually exclusive: “Internet access could mobilize some individuals to take part in new participatory acts in certain political areas, such as organizing protests. At the same time, in other domains existing political elites may use the Internet strategically to maintain and strengthen their political position.”

In order to understand why changes in ICTs should matter for political participation and in what direction, it is necessary to make the chain of arguments commonly referred to in the literature more explicit. Weare (2002) provides a thorough account of three key causal links between changing technology and democratic governance which can be briefly summarized as follows: A first link concerns the effects of technological change on communication activities. Here ICTs have brought different changes to four forms of communication – conversation, information aggregation, group dialogue and broadcast. While the first two are affected by evolutionary change, ICTs entail significant change to broadcast communication and revolutionary change to group dialogue. A second causal link is established with the role of information and communication in democratic governance. As communication has different roles in socialization, be it the mass media, interpersonal or organizational communication, the Internet tends to have influences on all three levels. It increases the volume and speed of information flowing through channels which link society and the polity in both downward and upward communication, reinforces and facilitates networks in political life through enhanced group dialogue capacities and also affects steering capabilities. Finally, a third set of causal links concerns societal mechanisms which introduce technological innovations into democratic processes and institutions and transform these. Here one can distinguish technology driven from socially and politically initiated change as well as instrumental from constitutive types of effects. Instrumental impacts are those focused on how technologies allow people achieving certain goals whereas constitutive impacts refer to perceptions and beliefs which transform such goals. According to Weare (ibid.), much of the analysis of technology and society is preoccupied with research on technology-driven, instrumental impacts in two main areas of study: a) the uses of ICTs by governments, organization and individuals and related changes in political activity, and b) instrumental impacts on political processes, the distribution of power, the content of policies and political outcomes. By contrast, another stream of research which is also interested in instrumental effects of technologies emphasizes the difference between technological potentials and the socially and politically mediated design processes and outcomes which become the focus of research.

The main hypotheses on the relationship between technological change through ICTs and political processes and institutions focus on: 1) changes in provision of and access to information, 2) new potentials of communication and 3) the mobilization of participation:

1. According to Levine (2002) four premises are often associated with e-democracy: technology offers greater convenience and this will spur participation; citizens need more information and modern ICTs provide it; the Internet as such allows for virtual discourse like a “massive town meeting”; and direct online participation without interference by power brokers will make democracy flourish. Proponents focussing on the enhanced information potentials hold views including the hypothesis that the variety of online information on electoral processes combined with the convenience offered by speed and flexibility of access to such information will stimulate increased electoral participation. The assumption behind is that lower cost and higher accessibility of politically relevant information will raise the aggregate level of political engage-

ment. This claim is more widespread among technologists, media professionals and consultants than among political scientists but also to be found among scholars in this discipline (e.g. Tolbert et al. 2003). Another hypothesis based on facilitated access to and free flow of information is increased transparency and legitimacy of government and politics with knock-on effects on institutional strengthening and democratization.

2. Arguments focussing on the enhanced communication potentials of the Internet expect it to allow for a virtual agora which will change political communication towards greater rationality and conditions for deliberative democracy. Some also establish a link between the new communication and networking culture and increased political participation: "Participation in blogs, citizen journalism, critical videos concerning public events or politics and confrontation of different opinions may arouse critical minds and interest in debate" (OECD 2007, 68). Kann et al. (2007) elaborate on similar arguments especially with respect to youth. They postulate positive effects of a new participatory culture on political participation through mechanisms such as promoting values conducive to democracy (e.g. citizen involvement, openness), teaching of citizen skills (e.g. exposure to political information and ideas) and inviting as well as facilitating political mobilization (e.g. via e-campaigning).
3. A further expected political potential of ICTs is the enhanced mobilization capacity for which Garrett (2006) points out three main roots: reduced costs of information distribution and participation, promotion of collective identity and fostering community development. A related expectation is enhanced human capital building. Furthermore, Macintosh (2003, 33) summarizes a number of specific potentials of technology-enabled information provision, consultation and participation in political decision-making which are expected to improve the policy-making process. They include reaching and engaging with a wider audience; providing relevant information more accessible; enabling more in-depth consultation and deliberative debate; and, facilitating the analysis and consideration of contributions.

However, there is also a by and large equally long list of counterarguments against the expected mobilization and democracy improving effects:

On the information side, main objections are the problem of information overload, the fact that more information does not necessarily mean better information and the need for assessing information quality. Another basic argument addresses digital divides and the possibility of social polarization as a consequence of inequitable access and usage capabilities, making the already "information-rich" richer and bringing benefits mainly to existing elites. This also extends to creating additional advantages for enhanced influence by privileged special interest groups through forms of e-participation. Also assessments of the communication and deliberative potentials of the Internet are accompanied by more sceptical hypotheses: A lack of discourse culture among the wider citizenry may lead to "flame wars" and fragmented posting of opinions instead of rational weighing discussion with coherent outcomes. Kampen and Snijkers (2003) point out further counterarguments against the "ultimate e-dream": Compared to all other possible reasons to use the Internet, using it for political participation is less attractive and has to compete within limited time budgets. Problems inherent to direct democracy are also relevant for e-democracy: the fear that populism could be enhanced; the limited amount of time citizens are willing to spend on referenda and the associated risk of decreasing motivation for participation; and last not least the problem of single issue approaches which is likely to entail inconsistent decisions.

As Stanley and Weare (2004, 509) emphasise, "empirical knowledge concerning the effects of the Internet on political participation lags far behind the theoretical debate, in part, because of the complex nature of the relationship between technology and politics and, in part, because of the entrenched empirical difficulties in identifying these effects". However, as will be shown in the next chapter, empirical research in this field has seen a significant increase and considerable developments within the past few years.

3 Empirical results regarding effects on democracy

Since its point of departure in the early 2000s, empirical research on e-democracy and e-participation has accumulated a large body of findings which shed light on many of the above mentioned hypotheses. Systematic approaches to an assessment of the existing state of the art have been started, among others, with comprehensive literature reviews. A holistic account of the research area has been attempted in particular with a literature study based on 105 full-text papers the results of which are summarized in two publications, one by Rose and Sanford (2007), the other by Sæbø and colleagues (2008). They map the corpus of literature on e-participation along a number of categories: research motivation; research themes; technologies; reference disciplines; reference theories; research methods and finally, research challenges. As valuable as this overview is, it does not provide answers to theoretical questions such as outlined in the above hypotheses. However, it does underline the need for a more systematic approach to arrive at such an assessment of the existing empirical findings when it points out the evaluation challenge as one of four key challenges of the field. Our review of empirical findings connects to this account but starts with a more limited objective regarding the breadth of topics and number of sources to be reviewed. We focus on particular aspects of the relationship between technology-enabled participation and political processes and institutions. At the same time we address the often contradictory or at least inconclusive evidence regarding key hypotheses.

Empirical research on the effect of electronically supported participation on democracy spans across several disciplines. Main resources of results are journals in the field of communication studies (political communication), political science and sociology (civic participation, public administration, governance), as well as information technology (e-democracy, e-participation), respectively interdisciplinary work from these fields. As a first step to a more systematic literature review to be done we have selected a range of 16 articles from scientific journals presenting empirical results regarding impacts of e-participation on democracy. In the following review empirical findings are clustered according to the scope of effects analysed. This overview is not meant to provide an in-depth analysis but aims at demonstrating contradicting findings exemplified by the selected studies and in so doing at identifying blind spots and useful research strategies to foster the debate. Therefore, the review is guided by the question of how the respective results on the impact on democracy were generated and of how far-reaching these effects are interpreted. Proceeding from these questions three research strands can be identified:

1. *Technology-centred analyses* comparing electronically mediated forms of participation with non-electronically mediated forms generate results on which tools are suitable in which ways for various kinds of participation activities. At this level no empirically grounded statements on effects on democracy in a wider sense are possible.
2. Analyses of the *effects of specific e-participation initiatives* focus on changing participation structures and communication patterns and ask whether the use of ICT enables more equal participation or maintains traditional power structures in order to identify tendencies towards democratization, stalemate or reinforcement of established structures.
3. Analyses of the *impact that the use of ICTs in general develops on social participation and democracy* deal with their indirect role in the shaping of society and political subjects. Impacts of ICTs are located in community building capacities and social capital building. Supposedly increasing or declining social capital (on an individual or collective level) affects different forms of civic participation in different ways; these effects are deduced from aggregate findings.

3.1 Technology-centred analyses

During the last decade a huge body of literature has been produced presenting micro-analyses of different forms of electronically supported forms of participation such as providing online information as a prerequisite for participation (Tsaliki 2003; Barraket 2005), e-voting (Norris 2003), or e-campaigning (Maguiere 2008; see also Ward et al. 2006). Relevant research questions have been in which ways the Internet facilitates political participation and provides access to decision-making.

Tsaliki (2003) examines the role of the Internet as a mechanism for social and democratic change by researching online political debates and environmental net-activism in five European countries, namely Finland, the Netherlands, UK, Spain and Greece. Based on empirical research in the field of ecological NGOs the study aims at investigating the extent to which the Internet can provide a forum for democratic reasoning. After laying the ground with a description of the level of Internet development in the countries under examination, Tsaliki (*ibid.*, 7) analyses the websites of the national offices of international environmental organizations to compare the ways “the Internet is used as a device of collaborative action and awareness raising” and thereby “facilitates an active form of citizenship”. Analysed categories are the degree of information offered, motivation strategies to active participation, user-friendliness of the websites, and the availability of interactive tools. Coming to the result that ecological organizations mainly use the Internet for the diffusion of information while discursive, interactive communication strategies are underused due to the lack of human and financial resources and of technical expertise, Tsaliki (*ibid.*, 11) concludes that ICTs complement already existing media techniques rather than displacing them: “[M]obilization at the grassroots is a result of a complex relationship between old and new media.” A similar conclusion can be found in the study of Barraket (2005) who conducted a content analysis of 50 Australian third sector organisations’ websites in order to find out in which way the third sector utilises web presence to create opportunities for individual and collective engagement. As a comparative measure Barraket draws on the “degree of functionality with regard to mobilising civic engagement” (*ibid.*, 26) which relate to the presence of website features such as contact information, site feedback functions or information on how to get involved in offline activities etc. The study concludes that in general organizations mostly use their online presence for information about their offline activities but they are less consistent in using it to mobilise civic engagement in new ways.

While these two studies focus on the analyses of technological artifacts, examples of research on the effects of using electronic tools can be found in the field of e-campaigning or e-voting. In a study on Internet campaigning in local elections Maguire (2008) investigates the impact of online candidate debates via blogs (web logs) on voters and candidates. Measures for the impact on voters are quantitative indicators such as traffic volume, time spent in the blog, or voter perceptions of the usefulness of debates. The impact on candidates is inquired with interviews on the potentials and burdens of ICT use in campaigning. The study shows some unexpected results. While researchers had presumed that the blog would lead to greater online interactivity among candidates and between candidates and voters, these effects were not observed. Rather the study finds a spill over into the physical realm in that online debates shaped the face-to-face debates. Furthermore, due to the written responses on the blogs the discourse was perceived as having a slower pace and as more formal or respectful. Maguire concludes that in campaigning ICTs supplement but do not supplant established forms of political communication.

Another study deals with the modernization of electoral administration and voting facilities by experimenting with alternative ways of e-voting in local government elections in the UK. In this research, Norris (2003) compares the effects of the use of ICTs such as the Internet, interactive digital television, SMS text messaging and touch-tone telephones with all-postal ballots and traditional local polling stations. The evidence from aggregate results of the survey shows that the use of all-

postal voting facilities has a significant impact in improving turnout by about 15% on average and improved public satisfaction with the electoral process, while e-voting had no effect. All-postal ballots had their most significant impact upon strengthening participation among the older generation, who were already most motivated to vote. Whereas e-voting is commonly argued to encourage turnout among younger people, the survey finds that it only had a modest impact upon the turnout of this generation. Given these results Norris concludes that the debate on e-voting may fail to identify the primary political impact of ICTs on democracy which rather “concerns its ability to strengthen the public sphere by expanding the information resources, channels of electronic communication, and the networking capacity for many organized interest groups, social movements, NGOs, transnational policy networks, and political parties” (ibid., 10).

3.2 Analyses of the effects of specific e-participation initiatives

Going beyond the mere analyses of e-participation offerings and their use, a second research strand deals with the question of how more interactive participation processes than the above described ones influence civic participation in terms of a more fundamental change of structures and practices. While one of the selected articles discusses a research framework for assessing the deliberative quality of online forums (Winkler 2007), the other examples present case studies that are connected to actual decision-making procedures labelled as “Internet-enabled” policy making (Rethemeyer 2007) and e-rulemaking (Stanley/Weare 2004; Zavestoski et al. 2006; Shafie 2008).

Providing a framework for the assessment of the democratic quality of EU online debates Winkler (2007) refers to central elements of the theory of deliberative democracy such as quality of actions of negotiation, modification of opinions and extension of political views. Winkler proceeds from an understanding of democratic quality of e-participation as posting democratically valuable and useful contributions in online forums and suggests evaluating these debates in terms of interactivity, inclusiveness and rationality. Variables for measuring interactivity are message format (e.g. replying to the postings of other discussants), message purpose (e.g. expression of a statement) and the level of agreement on previous statements. Variables for assessing rationality are rational arguments (e.g. providing reasons to validate the truth of assertions) and the balance of arguments (e.g. indications of learning effects). The findings of the study illustrate that online debate on the EU’s platform “Your Voice in Europe” involve well-elaborated interaction patterns and a relatively high discourse quality, both indicating vivid deliberative communications processes. However, discussions are dominated by a small group of participants and the EU’s objective to attract large and diverse parts of Europeans has not been met. Moreover, debates have not been taken into account in decision-making.

In order to analyse the Internet's impact in actual decision-making processes, Rethemeyer (2007) conducted two case studies in U.S. contexts applying policy network analysis – one network dealing with adult basic education policy and the other with mental health policy. The study proceeds from a network view of the political process and asks how organizations and interest groups bring to bear their influence in Internet-enabled policy making. According to Rethemeyer (ibid., 202), the “Internet effect [...] is the sum of the technology forces that are endowing some organizations with new capabilities and the efforts of status quo organizations to maintain things as they are”. The study suggests three possible outcomes of Internet-enabled policy making, namely democratization of the process, stalemate, or intensified corporatization. Investigating barriers to enter the researched networks, the position of different members within the networks and communication

relationships among them, the study concludes that the Internet appears to foster and intensify closed, corporatized policy networks. The author interprets his findings as an “evidence that the Internet is increasingly a tool of the powerful, entrenched, and organized rather than the unorganized or reform minded” (ibid., 212).

An example referring to the democratization of routine government decision-making processes in the US has been provided by Stanley and Weare (2004). The study reports on a government agency experiment and analyses the effects of a web-based discussion running in parallel to a traditional docket (i.e. the record maintained by agencies concerning rule makings and other actions) for written comments. The results show that the web-based discussion did expand participation and attracted nonstandard participants who raised new issues, but all in all only led to limited mobilization of inactive people. Moreover, the authors point to political and bureaucratic resistance as comments were considered in the draft stage and in the subsequent revision of the rule, but did not have “a significant impact in the final plan, largely because managers had already had much contact with numerous stakeholders” (ibid., 522). According to Stanley and Weare the study demonstrates the importance of seemingly small changes in political participation which resulted in increased work-loads of agency managers, an increased range of issues, and potentially broadened the level of conflict. Similar results have been found by Shafie (2008) who examined comments on 56 rules proposed by the U.S. Environmental Protection Agency over the decade in which the agency began to call for comments via electronic dockets. The survey finds “that comments submitted by regulated industries greatly outnumbered those from other individuals and groups before and after the e-commenting became common” (ibid., 399). Even though the proportion of citizens’ comments increased, industry continued to provide the majority of comments. According to Shafie, the activity patterns resembled the unequal participation that characterizes the legislative process. Moreover, the increase in citizens’ comments may have been caused by changes in the political landscape rather than by the use of ICTs.

Another study in the field of e-rulemaking by Zavestoski and colleagues (2006) takes a different perspective at these procedures by researching the perception of openness, transparency, and authenticity of the public participation process itself. In order to find out whether the Internet provides “an improved arena for democratic deliberation, allowing for differences and contention among citizen positions while leading to a workable consensus” (ibid., 384) two case studies were conducted. Using content analysis the authors analysed the comments of citizens and asked how they represent their own and others’ perspectives and how they assess the position of the agencies involved. Beside other findings, Zavestoski et al. come to the conclusion that the web-based process seems to have brought some legitimacy to the process in one of the case studies which allowed for two-way communication and discourse, whereas in the second case study a closed process (one-way communication) and continuing conflicts have not improved the perception of the regulatory agency. This shows that possible effects of e-participation also depend upon the design of participation procedures.

A different aspect of the extent to which political participation is deepened and enriched by the Internet is taken into account by a recent study by Talpin and Wojcik (2010) who compare the learning potential of online and face-to-face discussions on climate change. Using interviews and questionnaires, the authors evaluate the effects of different forms of civic engagement on the participants’ perceived levels of knowledge on environmental issues and on their political competence more generally. Talpin and Wojcik conclude that citizens who participated via both channels were generally more engaged and active and also assessed their deliberative experience as more enriching than people who used only one of the two channels.

3.3 Analyses of the impact of ICT use on the shaping of the political sphere

The mobilization thesis suggests that the level of Internet coverage and the degree to which ICTs are used in a society have an (either positive or negative) impact on political participation due to an increase or decline of the social capital of individuals and collectives. This strand of research does not ask for direct effects of e-participation tools or initiatives but searches for a correlation between the proliferation of virtual communities and electoral behaviour as well as collective, deliberative practices.

Bimber (2001) has tested the relationship between information availability via Internet and political engagement (voting and other forms) with data on the 1998 US National Election Surveys. The study shows that using the wealth of political online information and communication is not connected with participation. In particular, Bimber finds that accessing campaign information on the Internet has no effect on voting. The only positive relation found between obtaining political information from the Internet and other forms of participation (persuading others, working for a campaign, displaying a sign, attending a meeting, donating money) is donating money to a candidate, party, or group. Moreover, the findings show that the correlation between political interest and political information use via Internet was less strong than the association with other information sources (TV, newspapers).⁷ Another study presented by Tolbert and colleagues (2003) examines the impact of the Internet on voter turnout over time, using US national election data from 1996, 1998, and 2000. However, the authors come to largely different results: “The data suggests in presidential elections the Internet may increase voter turnout by giving individuals greater access to political information, and in turn stimulating increased turnout” (ibid., 179). Citizens with access to the Internet and online election news were significantly more likely to vote in the 1996 and 2000 presidential elections (ibid., 184). This impact on voting is not the only effect detected; the findings confirm also positive influences on other forms of political participation. In sum, the message of this source is clearly that the Internet has a mobilizing potential during elections. However, taken together the results of the studies by Bimber and by Tolbert et al. reveal an inconclusive picture which is not just explainable by differences in time periods but points to the need for further research to achieve clarification.

In a UK based study of Internet effects on individual political participation Gibson and colleagues (2005) offer a “contextualized” model of online political activity which integrates a wider range of online participation behaviours. Internet users were found to be more politically active than non-users in terms of the extent to which they engage in political discussion and in contacting of politicians and officials. The survey thus confirms previous studies in finding that the Internet expands the numbers of the politically active, specifically in terms of reaching some of the groups that are typically seen as less active in conventional or offline forms of politics. In this context, Gibson et al. refer to socially disadvantaged citizens and young people. According to the results, especially young people are significantly more likely to engage in online politics. As regards female citizens however, the barriers that exist to more active forms of participation seem to be reproduced in the online world. Gibson et al. call for the re-evaluation of the “normalisation thesis” which argues that the Internet will lead to diminishing the pool of politically engaged citizens by reinforcing existing social biases in participation (see also chapter 2.2.). On the contrary, they argue that the Internet provides technology-specific stimuli to political engagement that are unrelated to those

⁷ Parallel evidence for the relative low influence of convenience and costs on voter turnout in elections comes from findings on the impact of structural-legal reforms (alternative voting methods in state-level elections) in a study by Fitzgerald (2005).

linked to offline participation (*ibid.*, 578): “Even with a pre-existing interest in politics, receiving e-stimuli and developing experience of the Internet increase the likelihood that one will engage in organisational contacting and online participation.” These results are reconfirmed by Jensen and colleagues (2006, 47) who stress that “Internet-mediated activities are not simply an extension of offline political practices, but appear to be a distinct, although socially embedded, medium in which political behavior takes place”. In a US context, Jensen et al. explore the relationship between offline and online interactions with local governments and other modes of associational life. Contrary to Putnam’s theory they find that political and community-oriented engagement can be empirically differentiated from other forms of associational life such as being a member of an online or offline hobby group. In terms of socioeconomic factors such as income, length of time living in a community, and age, the survey – like the afore-mentioned study – concludes that there is a greater democratization of the political process in online contexts compared to offline. The thesis that social capital building correlates with political engagement has also been investigated in a South Korea based survey by Kim (2006). The study tests the impact of different patterns of Internet use, namely e-deliberation, “e-social capital building” and e-shopping on political engagement. Taking into account that there is less a decline in political engagement in general but a change of modes of participation, Kim attributes a crucial role to the Internet in invigorating protest politics and alternative political movement. As a result he finds that while e-deliberation (i.e., discussions on public issues) increases political engagement, other forms of social capital building (e.g., being a member of (non-political) virtual communities) do not contribute to enhancing civic participation in politics. The proliferation of virtual communities per se is not an indicator of political revitalization but deliberative practices could be an integral element to regenerate civic political life. By reducing passiveness and strengthening political efficacy online deliberation “becomes a cornerstone of citizens’ democratic conduct and participatory practices”, Kim argues (*ibid.*, 44).

A very interesting study conducted by Norris (2005) provides more differentiated results on the effects that Internet use develops upon different forms of political activism, namely voting, campaign-oriented forms of participation, cause-oriented activities and civic-oriented activities. While campaign-oriented activities encompass more traditional modes of participation, such as being a member of a political party or donating money to parties and aim at influencing parliament and government in representative democracies, cause-oriented activism focuses on influencing specific policies by means of e.g. consumer politics or protest activities. Civic-oriented activities involve building communities to negotiate local problems. When aggregating the data from the 19-nation European Social Survey, Norris finds a significant linear relationship between the use of Internet and civic-oriented activities as well as with cause-oriented activism, but only a modest correlation with campaign-oriented activism and a negative correlation with voting. According to the analysis the most important factors predicting activism are internal political efficacy (i.e. a person’s feeling that s/he can influence the political process), socio-demographic factors such as age, education, region, as well as a sense of civic duty. After these the level of Internet use was found to be a more important predictor of activism than factors such as social and political trust or the use of news media. Norris assumes that the primary beneficiaries of the ICT use will be political actors lacking traditional organizational resources that are useful in politics (*ibid.*, 35). Based on these research results, she suggests that social movements and interest groups will be strengthened more by ICTs than conventional channels of political participation exemplified by voting, parties, and election campaigning (*ibid.*, 20).

4 Discussion and conclusions

Does e-participation matter? Our contribution started with the aim to contribute to this question with regard to effects of this emerging form of participation on political processes and institutions – and thus on democracy. Overall, reviewing a substantial sample of the relevant literature on hypotheses and existing empirical evidence reveals a quite contradictory picture. To adjudicate to what extent impacts live up to expectations of stimulating and reviving civic engagement and democratic practices, existing evidence from empirical studies is too inconclusive. This has been exemplified among others with issues such as the effects of Internet use for electoral information on voter turnout as well as on other forms of political participation.

As has become evident, new applications of ICTs are increasingly changing the “technology of democracy”. E-participation is an emerging and fast growing field of multi-disciplinary study. A wide-spread understanding of this new form of political participation views it as involving efforts to broaden and deepen political participation with the support of ICTs, complementing but not substituting traditional institutions of representative democracy. A variety of new forms of electronic participation, such as e-petitions, e-consultations, e-deliberative forums, e-polling, and e-voting have emerged and are being practiced. The comparison of empirical results on several of these forms reflects inconclusive results regarding indicators of civic participation and democracy such as openness and equal participation, political efficacy of citizens as well as transparency and legitimacy of political procedures. Although results vary through time and research designs, the tendency is that the mobilizing impacts on elite-directed, formal procedures are rather modest (e.g., regarding their capacity to foster more equal participation). In contrast, studies on the deliberative potentials of the Internet and studies that also take into account civic-oriented (i.e., non-formal processes) and elite-challenging engagement do suggest an effect of technology-specific stimuli. A second look at our categorization of e-participation tools in table 1 (see chapter 2.1), which refers to the type of engagement as well as to the level of participation shows the following: the selected empirical research presented in this paper predominantly centres on individualist activism and on the information function (‘e-enabling’) and ‘active participation’ function (‘e-empowering’) of electronic tools. In contrast, findings on forms of political engagement rather found in the domain of ‘e-engaging’ (e.g., online deliberation) and on impacts on collectivity and related conceptions of political participation are still fragmentary as they have only recently become a subject of investigation (see e.g. Albrecht 2010). Of course, this development in research coincides with the rather recent advances of social media applications (c.f. Karpf 2008, Benkler/Shaw 2010, Kaschesky/Riedl 2010).

One of the preconditions for the possibility of aggregate effects of e-participation on democracy to be observed at all is a sufficient spread of e-participation offerings as well as practices. To what extent e-participation opportunities are growing needs to be substantiated by further empirical studies. The dearth of conclusive results points to the demand for evaluation approaches which enable comparable and systematic assessments. Advancing the state of knowledge requires above all methodological progress in empirical research based on elaborated evaluation frameworks and comparative research designs. Inconclusiveness and lack of comparability of findings are to a large extent owed to the neglect of differences in approaches, contexts, scale and level of e-participation studied which could be taken into account more adequately by systematic evaluation designs. Macintosh and Coleman (2006, 37) recommend doing “more sophisticated collaborative multi-disciplinary research” and not to concentrate on specific examples in isolation. They suggest “to analyse, differentiate and compare ecologies of eParticipation”, that means “to explore differences and commonalities between different eParticipation activities in terms of technology, system, structure, patterns of use” (ibid.).

This entails solving a number of challenges such as specifying relevant dimensions, criteria and measurable indicators of impacts on democracy and civic participation in particular, and accounting for different aspects of quality of democracy, including effective governance. A successful solution of these methodological challenges in the elaboration of systematic evaluation frameworks and their subsequent application for the empirical study of comparable “ecologies of e-participation” will offer better chances for a clarification of open questions and new insights on the significance of technology-mediated political participation.⁸ As has become clear from the literature review this demanding task requires taking into account and assessing multiple levels of impact on indicators of democracy independently from other influence factors. To identify relevant criteria for assessing impacts on democracy also requires comparing different normative concepts of democracy to derive basic principles and criteria which are relevant to distinct models of democracy (Päivärinta/Sæbø 2006). However, efforts to arrive at non-controversial criteria of democratic quality lead to two basic complications: (1) The composite nature of modern liberal democracy often involves conflicting demands and, (2) as a form of government democracy also requires governing effectively. Hence, there are two different notions of quality of democracy implied: one understood in terms of “democraticness” and the other understood in terms of effective governance. The assumption, that democracy favours good governance, does not allow a reverse – and demands for a careful look at modern democracies’ undergoing changes in their systems of governance. A shift towards network forms of governance can have positive (e.g. in terms of inclusiveness) as well as negative (e.g. in terms of legitimacy) impacts on democracy and calls for new approaches to assess e-participation also with respect to democratic performance of governmental and political systems.

⁸ For fruitful starting points see Macintosh/Whyte (2008), DEMO-net (2008), Aichholzer/Allhutter (2008), and Kubicek et al. (2011, 40pp.)).

5 Appendix

Table 1: E-participation core tools

<i>E-participation chat rooms</i>	Web applications where a chat session takes place in real time especially launched for e-participation purposes
<i>E-participation discussion forum/board</i>	Web applications for online discussion groups where users, usually with common interests, can exchange open messages on specific e-participation issues. Users can pick a topic, see a “thread” of messages, reply and post their own message
<i>Decision-making games</i>	These typically allow users to view and interact with animations that describe, illustrate or simulate relevant aspects of an issue; here with the specific scope of policy decision-making
<i>Virtual communities</i>	Web applications in which users with a shared interest can meet in virtual space to communicate and build relationships; the shared interest being within e-participation contexts
<i>E-panels</i>	Web applications where a ‘recruited’ set, as opposed to a self-selected set, of participants give their views on a variety of issues at specific intervals over a period of time
<i>E-petitioning</i>	Web applications that host online petitions and allow citizens to sign in for a petition by adding their name and address online
<i>E-deliberative polling</i>	Web applications which combine deliberation in small group discussions with random sampling to facilitate public engagement on specific issues
<i>E-consultation</i>	Web applications designed for consultations which allow a stakeholder to provide information on an issue and others to answer specific questions and/or submit open comments
<i>E-voting</i>	Remote Internet enabled voting or voting via mobile phone, providing a secure environment for casting a vote and tallying of the votes
<i>Suggestion tools for (formal) planning procedures</i>	Web applications supporting participation in formal planning procedures where citizens’ comments are expected to official documents within a restricted period

Table 2: E-participation relevant general tools

Webcasts	Real time recordings of meetings transmitted over the Internet
Podcasts	Publishing multimedia files (audio and video) over the Internet where the content can be downloaded automatically using software capable of reading RSS feeds
Wikis	Web applications that allow users to add and edit content collectively
Blogs	Frequently modified web pages that look like a diary as dated entries are listed in reverse chronological order
Quick polls	Web-based instant survey
Surveys	Web-based, self-administered questionnaires, where the website shows a list of questions which users answer and submit their responses online
GIS-tools	Web applications that enable the users to have a look at maps underlying planning issues and to use them in various ways
Search Engines	Web applications to support users find and retrieve relevant information typically using keyword searching
Alert services	One-way communication alerts to inform people of a news item or an event, e.g. email Alerts and RSS Feeds
Online newsletters	One-way communication tools to inform a general audience or a pre-registered audience of specific news items and events
Frequently asked questions (FAQ)	A 'tree' of questions and answers that can be searched using keywords or by inputting a question or statement
Web portals	Websites providing a gateway to a set of specific information and applications
Groupware tools	Tool environment to support computer-based group works
LIST SERVS	Tool for information provision and two-way interaction that can be used for Citizen2Citizen, Citizen2Administration, Citizen2Politicians etc.

Table 3: Areas of e-participation

Information Provision	ICT to structure, represent and manage information in participation contexts
Community building/ Collaborative Environments	ICT to support individuals come together to form communities, to progress shared agendas and to shape and empower such communities
Consultation	ICT in official initiatives by public or private agencies to allow stakeholders to contribute their opinion, either privately or publicly, on specific issues
Campaigning	ICT in protest, lobbying, petitioning and other forms of collective action (except for election campaigns, see electioneering as participation area)
Electioneering	ICT to support politicians, political parties and lobbyists in the context of election campaigns
Deliberation	ICT to support virtual, small and large-group discussions, allowing reflection and consideration of issues
Discourse	ICT to support analysis and representation of discourse
Mediation	ICT to resolve disputes or conflicts in an online context
Spatial planning	ICT in urban planning and environmental assessment
Polling	ICT to measure public opinion and sentiment
Voting	ICT in the context of public voting in elections, referenda or local plebiscites

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