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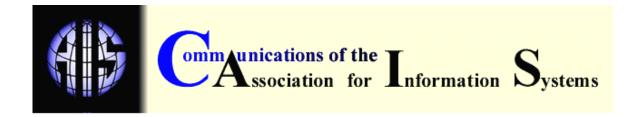
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MODELS OF E-DEMOCRACY

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ABSTRACT

Several theories of E-Democracy have been presented, and implementations of and experiments in E-Democracy emerged. However, existing literature on the subject appears rather non-comprehensive, lacking an integrated basis for gathering knowledge in the future. After an analysis of theories of E-Democracy versus implementations reported in related literature, we address the need for a model generally absent from contemporary theoretical literature: the Partisan model of E-Democracy. We aim to simplify the current "jungle" of E-Democracy models into four idealised models: the Liberal, the Deliberative, the Partisan, and the Direct. We discuss how current theories of E-Democracy, in addition to reported implementations, may be covered by these models.

The explanatory potential of these four models is illustrated by analysing implementations of a communication technology for E-Democracy, the web-based discussion forum. We argue that, instead of viewing technology such as the Internet as a "black box," any implementation of E-Democracy should be adapted to the specific democracy model(s) pursued by a particular initiative. In addition, E-Democracy researchers could be more specific about their standard of democracy, in order to avoid artificial comparisons or criticisms of contemporary E-Democracy without an explicit framework of criteria. Finally, we discuss the possibilities of unifying the ideals from different models on E-Democracy. We suggest that any context of E-Democracy may in fact require elements from all four models to stay dynamic over time.

Keywords: E-Democracy, democracy models, literature review.

I. INTRODUCTION

New technology, particularly the rapid development of the Internet, changes the conditions for communication and co-ordination and increases the interest in technology support for participation in political processes [Van Dijk, 2000]. The concept of E-Democracy refers to the use of information and communication technology (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. Initiatives for E-Democracy from the local municipality level [Grönlund, 2003, Sæbø and Päivärinta, 2005] to international programmes [Commission,

2002], for instance e-Europe 2005, are addressing a belief that the new ICT may increase democratization.

The need for empirical studies and subsequent theory-building in the field are addressed in Andersen and Henriksen [2005] and in Grönlund [2004]. Nevertheless, despite idealistic intentions of presenting ground-breaking E-Democracy theories and experiments, their impact on public participation in most cases remains modest [Brants et al., 1996, Hoff et al., 2003]. Many initiatives address vaguely the actual democracy model or specific aims pursued. Mixed expectations among citizens and politicians on E-Democracy are reported by Rose and Sæbø [2005]. Responding to calls for theory-building in the field, we review theories and empirical studies and suggest an integrated framework of four idealised models of E-Democracy.

The remainder of the paper begins with an introduction of our review process (Section II). Subsequent to an analysis of the theories of E-Democracy versus the implementations reported in the existing body of literature (Section III), we address the need for a model of E-Democracy, which is currently absent in contemporary theoretical literature: the Partisan model on E-Democracy (Section IV). Our framework consists in total of four idealised models of E-Democracy: the Liberal, the Deliberative, the Partisan, and the Direct. We will illustrate how current theories of E-Democracy, in addition to reported practical implementations, are addressed by these models. The framework addresses shortcomings in current implementations of E-Democracy versus the theoretical recommendations. In theoretical literature, emphasis has been on Direct democracy. However, this theory remains largely absent from the reports on actual implementations of E-Democracy.

We illustrate the explanatory potential of these four models by analysing implementations of one specific communication technology in connection with E-Democracy, the web-based discussion forum, in accordance with the framework (Section V). Finally, we discuss the possibilities of unifying the ideals from different models on E-Democracy in the implementations (Section VI). We suggest that any aspect of E-Democracy may in fact need parts of all four models to stay dynamic over time.

II. RESEARCH APPROACH

A great number of reports on various E-Democracy implementations have been published. Although E-Democracy is mentioned in reviews of E-Government [Andersen and Henriksen, 2005, Grönlund, 2004], we found few reviews of the empirical E-Democracy literature that summarize previous research with the purpose of understanding use of ICT for E-Democracy in general. A research review summarising this literature is valuable for further development and research in the field [Cooper, 1998, Hart, 2001, Webster and Watson, 2002]. Based on this literature review, an E-Democracy framework is presented. To illustrate the explanatory potential of the framework we evaluate cases of E-Democracy discussion forums related to the suggested models of E-Democracy.

PAPER COLLECTION

This paper is based on reviews of two strands of research. A review of theoretical contributions on Democracy models identifies forms of democracies as ideal types. Our subsequent review of E-Democracy cases and initiatives allow us to summarise trends and focus on areas which were realized in practice.

The review process resembles a method followed by Andersen and Henriksen [2005]. Online research databases (EBSCO Host, Sage, IEEE Xplore, Communications of AIS and ACM Digital Library) were consulted in November and December 2004. Subsequent searches were completed by the summer of 2005. During the search, the following keywords were used: Edemocracy, digital democracy, electronic democracy, democracy and Internet, democracy and information systems. In addition to articles in journals, we found it necessary to widen the selection of literature sources used because few articles had been published in prestigious

journals. Hence, academic conference contributions were included (whereas conference proceedings without references to earlier academic contributions were excluded).

The initial screening excluded solely conceptual suggestions lacking empirical evidence (apart from reviews and contributions of discussion models of Democracy), and articles with only a peripheral reference to E-Democracy. For example most submissions from Communications of the ACM special issue on E-Democracy [Grönlund, 2001] are not included in the review due to their conceptual focus, with the exception of Aström's [2001] article, which addresses Democracy models in particular. The issues of e-voting, the digital divide, and ICT and development were also excluded from the review. Apart from recognizing the extensive visibility of e-voting in the literature in general (see Altman and Klass, [2005] for an introduction to this literature), we included no review of characteristics of e-voting technology as such. A great proportion of evoting research focuses on the technical construction and legal aspects of using the technology, instead of reporting on actual implementations of e-voting systems. Sometimes, the issue of the digital divide is mentioned, e.g. in relation to the challenges of guaranteeing access to digital information and democratic applications. The digital divide is also discussed in relation to the field of ICT and development in developing countries. However, for the purpose of our research, the issues of the digital divide and ICT and development relate to the process of democratization in general and should remain in the realm of nation-wide development policies and infrastructures rather than to focus on actual solutions for E-Democracy.

The number of contributions was increased during the reading of articles by using citation indexes (using ISI Web of Science Citation Index) and by following references to literature not identified earlier.

DATA ANALYSIS STRATEGY

The data analysis took two approaches iteratively, one theoretical and one grounded. The theoretical review was first conducted to form an integrated framework in order to classify the empirical literature later on. However, while reading the empirical research and reports of Edemocracy implementations, we found that some focused on concerns that remained unaddressed in the theoretical Democracy models literature. Hence, our elaborated framework of E-Democracy models was also grounded on the review of the empirical literature, now adding to the theory.

III. CURRENT MODELS ON E-DEMOCRACY

A democracy model is an idealised form of democracy which declares a set of ideals about how democracy should take place. Different frameworks and categorizations of democracy models have emphasized varying characteristics to outline the differences.

MODELS DESCRIBED AS INDIVIDUAL PROJECTS

Some models emerge as individual projects of groups of social scientists, and are therefore described in differing ways, making direct comparison difficult. According to the Aggregative Democracy model, politics is the outcome of conflicting individual interests [Eriksen and Weigård, 1999]. Politicians are responsible for aggregating differing interests as they occur through elections [Eriksen and Weigård, 1999]. A similar model is the Thin Democracy model [Åström, 2001] in which the citizen is regarded as uninterested in politics, and the elite competes for the citizens' votes.

The Participatory Democracy model emphasises the importance of participation; equal rights can only be obtained in a participatory society which encourages a sense of political efficacy [Held, 1996, Pateman, 1970]. Related models are the Deliberative model [Eriksen and Weigård, 1999, Gimmler, 2001, Lively, 1975] and the Strong model [Barber, 1984, Åström, 2001]. These models emphasise the role of public discussions, the importance of citizen participation, and the existence of a well-functioning public sphere.

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The models above are all founded on representative democracy, whereas the Direct Democracy model represents a radical alternative. In accordance with the Direct Democracy model, network-based groups and individuals take over the role of traditional institutions [Bellamy, 2000, Held, 1996, Lynne, 2004]. As well, the Quick Democracy model [Åström, 2001], allows that the majority should directly influence decision making, although the representative models of decision-making can be seen as necessary in certain situations.

FRAMEWORKS OF DEMOCRACY MODELS

A body of theoretical literature on democracy analyses the different models and compares their characteristics. Held's [1996] ideal forms contain four historical models: (Classical Athenian, Republicanism, Liberal, and Direct Marxism) and four contemporary models (Completive Elitist, Pluralism, Legal, and Participatory). In the Classical (Athenian) Democracy the state was governed by a general assembly of all male citizens, where they possessed political equality and had the opportunity to rule and be ruled in turn. What characterises Republicanism is that personal liberty is dependent on political participation, and the objective is to balance power between citizens, aristocracy, and monarchy. Liberal Democracy is characterised by a representative government. Citizens are involved as voters, as elected representatives at the local level, and as participators in the public debate. The latest historical model, the Direct democracy model, emphasises the importance of bringing power to the general public. Decisions are justified by consensus (communism), or by frequent elections giving mandates to elected members of government (socialism).

Competitive elitism is represented in Held's first model on modern democracy. Experts represent (or claim to represent) different interests in society and act in policy networks. Political experts are heavily involved in the formation of policies and the definition of public services. According to the Pluralism democracy model, a competitive electoral system, consisting of a minimum of two parties, secures the government through electoral majority and political liberty. This political system divides power through checks and balances into three branches of government: the legislative, the executive, and the judicial, in addition to the operational administration. In the Legalist Democracy model, the majority principle protects individuals from random governance. Effective political leadership is underpinned by liberal principles, characterised by minimal state intervention with civil society and the general public's private life. The Participatory Democracy model emphasizes that equal rights are achieved through a participatory process where skilled members of society are profoundly involved in the governing process.

FRAMEWORKS OF E-DEMOCRACY MODELS

Held's framework forms the background for a body of theoretical work which relates information and communication Technologies (ICT) to forms of political organisations, suggesting models of E-Democracy. Van Dijk [2000] abandons the obviously less relevant historical models, and analyses the role of ICT in relation to Held's four modern democracy models (Pluralist, Participatory, Legalist, and Competitive Democracy). He considers the models to be primarily characterised by:

- 1. whether the main goal of democracy is opinion forming or decision making, and
- 2. whether the primary means of democracy is the use of elected representatives, or direct voting by the people.

He describes four roles for ICT: allocution (one way distribution of information), consultation, registration (central collection of information including balloting) and conversation. He also adds a fifth model (Libertarian) which emphasizes 'autonomous politics by citizens in their own associations using the horizontal communication capabilities of the internet' (p.45).

A related, but simpler framework of four E-Democracy models is introduced by Bellamy [2000]. Whereas Van Dijk discusses the role of ICT as a supplement to traditional communication

mechanisms, Bellamy adds a post-Internet Democracy model (Cyberdemocracy), where the Internet no longer represents a supplement to traditional communication channels, but emerges as a crucial pre-condition for democracy. Bellamy claims that her four models (Consumer, Demoelitist, Neo-republican, and Cyberdemocratic) serve as

'Logically coherent constructs abstracted from specific social settings or from competing political values', seeking to 'ground electronic democracy in a set of rival discourses connecting democratic values to technological change' [Bellamy, 2000].

The Consumer model focuses on the role of citizens as consumers of public services, whilst accepting well-established features of democracy such as parliamentary institutions, elections and parties. The main democratic value is the legal right to services, and the model seeks to refocus democracy around the effective provision of these services: value for money. Demo-Elitist democracy also accepts traditional institutional features as the basis for democracy. The general public's main personal interests are assumed to lie outside 'high' politics, rather on services and economic prosperity. This lack of interest leads to the fact that political decision making is the responsibility of an elite of specialists and experts, whose task is to be mediators in conflicting interests and claims. Experts representing (or claiming to represent) differing interests in society act in extended policy networks, forming the elite which is effectively involved in the formation of consensus, the articulation of policy and the defining of services.

Neo-Republican democracy focuses on the quality of citizen's participation and involvement. Citizens are expected to be active, especially at the micro- and local level, their citizenship contributing both to the emancipation of the political sphere and to their own moral, social, and intellectual development. The model is rooted in radical assumptions of common social rights and responsibilities, where the revitalizing of civic spirit is a central objective. The Cyber-Democratic model represents the most radical change to traditional democratic institutions and features. Traditional institutions lose power and influence in favour of network-based groups forging identities with alienated individuals defying barriers caused by society, and the nation states, cultural background and class. This virtual society of networks is dependent on the use of the self-organizing internet communities. In this post-modern vision (or nightmare) of extended pluralism escaping the bounds of cultural hegemony, yet struggling to retain social cohesion and collective political will, ICT is no longer a supplement to traditional communication channels, but a condition for democracy.

IV. AN ELABORATED FRAMEWORK ON E-DEMOCRACY

To simplify the comparison of the various democracy models mentioned above to fit our purposes, let us categorize them based on two fundamental characteristics defined in relation to any democratic process: inclusion in decisions and control of the agenda [Dahl, 1989]¹. Inclusion

Although Dahl (1989) assumes that these characteristics should be present in any genuinely democratic process, we recognize the fact that e.g. in different forms of representational democracy varying levels of actual implementations of these ideals exist. Dahl summarizes altogether five criteria for "genuine" democratic societies and processes. In addition to the issues of who to include in the decisions and who are in charge of setting the agenda, he highlights the issues of effective and equal participation opportunities, voting equality, and the need for enlightened understanding of the citizens. However, unlike inclusion and control of agenda, we consider the latter three as absolute requirements for democracy whereas, in practice, more fundamental differences exist between different democracy models, making these two dimensions as meaningful to be analysed in more detail. That is, we argue that without the equal right to participate, the 'one person one vote' principle, and the possibility of being informed about the public matters in the first place, we cannot speak of true democracy, whereas there can be differences in democracies with regard to who are actually operationally making the decisions

refers to the idea of whether all adults which belong to society are able to participate in current debates and decision-making processes. One important discourse mentioned in the literature on democracy draws analytical lines between representative and direct democracies [Held, 1996, Lively, 1975, Van Dijk, 2000], where citizen-oriented initiatives to affect decisions are often linked to direct democracies.

Control of the agenda is related to the very issue of who decides what should be decided in the first place – especially whether the citizens are able to address issues and provide decisions themselves as the needs emerge. Democratic communication can be initiated by citizens [Rodan, 1998, Tsaliki, 2002], by external stakeholders like the traditional press [Fung, 2002], parties [Jensen, 2003], or by the government [Macintosh et al., 2005, Sæbø and Päivärinta, 2005]. By shifting from traditional democratic communication towards communicating by digital media, the visibility of who is in charge has become increasingly unclear. Different stakeholders do not always share assumptions on the purpose or mode of participation intended by those in charge of developing the communication systems [Sæbø and Päivärinta, 2005, Rose and Sæbø, 2005]. Table 1 introduces four general-level, idealised democracy models based on these two main dimensions.

Citizens set the agenda

Partisan Democracy

Direct Democracy

Government (politicians and officers) sets the agenda

Liberal democracy

Deliberative democracy

Citizens mainly implicitly included in decision making processes

Citizens have an explicitly defined role in decision making processes

Table 1. Models of E-democracy

PARTISAN DEMOCRACY

The need for a new model

The review unveiled some cases, where e-democracy was characterized by being independent of or in opposition to existing power structures. The impact is materialized mostly through general-level pressure of visible "public opinion" [Fung, 2002, Schneider, 1996] or through elections [Moon and Yang, 2003]. None of the theoretical discussions on democracy models identified (see appendix 1) address such cases. Habermas' [1996] discussion on discursive deliberation partly address these issues, but his contribution is not to be considered as a democracy model, but an attempt to address important characteristics in every democratic society [Eriksen and Weigård, 1999]. Legitimising public action in an active communicative society focuses on how to achieve commitment through discourse representing diverging viewpoints [Habermas, 1996]. Existence of independent communication channels (not owned or directed by the government) is a prerequisite to achieve a rational discourse [Habermas, 1996]. Ideal democracies require equal opportunities for citizens to place questions on the agenda and to express reasons [Dahl, 1989]. Hence an important part of E-Democracy is communication uncontrolled by government and without clear connection to the decision-making process.

and controlling the agenda in practice. For example, the idea of representational democracy does not actually require citizens to be in charge of setting the agenda or deciding particular issues.

Characteristics

Partisan democracy initiatives are characterised by citizen-initiated participation and implicit citizen intervention in the decision-making process. Active citizens participate in the political debate, but not through traditional channels or solely through representatives. Information technology seeks to obtain visibility for alternative political expressions and criticism without interruptions from the political elite [Fung, 2002, Hurwitz, 1999, Moon and Yang, 2003, Olsson et al., 2003, Paolillo and Heald, 2002, Papacharissi, 2004, Rodan, 1998, Schneider, 1996, Stromer-Galley, 2002, Tsaliki, 2002]. Unrestricted discussions set the agenda. Examples include use of independent online communities discussing politics [Tsaliki, 2002], chat room discussions [Fung, 2002], Usenet discussions [Hill and Hughes, 1998, Schneider, 1996], and blogging [Griffiths, 2004, Macintosh et al., 2005].

The opportunity to be heard and to meet an audience can be considered important [Moon and Yang, 2003, Paolillo and Heald, 2002, Stromer-Galley, 2002], even when the audience is scarce or absent [Hurwitz, 1999, Stromer-Galley, 2002, Tsaliki, 2002]. New voices in the political arena [Fung, 2002, Stromer-Galley, 2002] and empowered citizens expressing alternative ideologies [Fung, 2002, Papacharissi, 2004] might fortify the importance of Partisan democracy solutions, even when the connection to the prevailing decision-making processes remains implicit or absent.

Challenges

The missing distinct connection to the decision-making process is a challenge [Hurwitz, 1999, Paolillo and Heald, 2002, Schneider, 1996]. Online services not connected to the traditional political process [Papacharissi, 2004] can be naïvely regarded as a panacea that promotes meaningful debate [Tsaliki, 2002]. However, the meaning of such debate may be hard to discern when only a few participants post a considerable number of contributions [Rodan, 1998, Tsaliki, 2002], leaving the representative body confused [Schneider, 1996]. In addition, citizens seem to be more eager to contribute new posts than relating themselves to arguments of other participants [Paolillo and Heald, 2002] thus reducing the dynamic development of new arguments [Papacharissi, 2004, Stromer-Galley, 2002].

Beyond a South-Korean "success story" of partisan democracy that promoted oppositional viewpoints against a dominant government and mainstream media [Moon & Yang, 2003], the experimental solutions have only partially succeeded with emphasising alternative information [Hurwitz, 1999, Tsaliki, 2002], and, to a much lesser extent, in bringing in a new audience [Olsson et al., 2003, Tsaliki, 2002]. Missing audience has resulted in a lack of reflexivity [Olsson et al., 2003] and the inability to bring some arguments forward [Tsaliki, 2002]. Hence support of the public sphere may be a more evasive target [Schneider, 1996]. Individual users may dominate the debate without building a common consensus that is valuable to society [Hurwitz, 1999].

As the roles of communicators in typically anonymous partisan e-democracy solutions are not explicitly stated, creation of common consensus and opinions can become challenging. Participants supporting the existing regime may be hiding behind artificial roles [Rodan, 1998], and "professional writers" may advocate the official view, fighting against the engagement of the common citizen [Fung, 2002]. The professionals can also co-ordinate their arguments, making it even harder for ordinary people to argue back [Fung, 2002].

LIBERAL DEMOCRACY

Characteristics

The government-based agenda for decision-making and implicit citizen participation in the decision-making process outside elections characterises Liberal Democracy. This category includes several previously defined democracy models and concepts. Liberal democracy in general is characterised by a representative government, where citizens form the electorate, giving mandates to representatives at the local level but also participating in the public debate [Held, 1996]. The purpose of politics is to re-concile conflicting interests, and politicians are

responsible for mediating these conflicts as they occur, through negotiation [Eriksen and Weigård, 1999]. In Liberal Democracy, the majority rule protects individuals from random government. Effective political leadership is underpinned by liberal principles such as minimum state intervention in civil society and respect for individual privacy [Held, 1996, Van Dijk, 2000].

Liberal democracy forms an extensive part of the reported projects. The main emphasis ranges among several issues: from how to involve young people in the development [Detlor and Finn, 2002, Finn and Detlor, 2002], characteristics of the participators [Marcella et al., 2002, Weber et al., 2003], factors influencing use and adoption [Johnson and Kaye, 2003, Weare et al., 1999], how governmental services influence power structures [La Porte et al., 2002], characteristics of success stories [Jensen, 2003], characteristics of design [Ward and Gibson, 2003], and issues of online communication [Rose and Sæbø, 2005]. The objectives for such services vary. Citizens may be asked to submit suggestions to the public authorities [Aidemark, 2003], dialogue may be initiated for the purpose of teaching inhabitants how to become e-citizens [Biasiotti and Nannucci, 2004], or citizens can be given the opportunity to communicate with representatives and government officials [Nugent, 2001].

Challenges

Finn and Detlor [2002] experienced discrepancies between user requirements and government standards. Poor design – e.g. restricted opportunity to do searches, the absence of site maps, and out-dated information [Cullen and Houghton, 2000] – were found to decrease participation. Absence of interactivity makes websites static, hence they have no influence on election results and turnout [Ward and Gibson, 2003]. Limited audience, unstable technology, and expenses limit the opportunity to develop high quality solutions [Ward and Gibson, 2003]. Politician's lack of knowledge makes it difficult to use the new technology [Ward and Gibson, 2003]. The workload for different stakeholders has to be limited since new systems often develop on top of traditional systems [Ho and Ni, 2004].

DELIBERATIVE DEMOCRACY

Characteristics

The ideal of Deliberative Democracy connects citizens more explicitly and directly to decisionmaking processes [Held, 1996, Pateman, 1970] and emphasizes the role of open discussions in a well functioning public sphere [Gimmler, 2001]. Politicians and citizens share an interest in dialogue and discourse leading to the formation of political opinion. Still, as it is a form of representative democracy, the input and cooperation between citizens and politicians constitute the legalisation of display of power. In relation to Deliberative Democracy, several ideas and concepts have been suggested. The concepts of Participative [Held, 1996, Pateman, 1970, Van Dijk, 2000], Protective, and Developmental Democracies [Held, 1996] emphasise the achievement of equal rights and a balance of power that can only be accomplished in a participatory society. The importance of citizen participation and involvement are emphasised further in the concepts of Neo-republican and Plebiscitary democracy [Bellamy, 2000, Van Dijk, 2000]. Information technologies are developed with the purpose of increasing citizen participation and involvement in political decision-making beyond casting their vote in elections or participating in electoral campaigns [Biasiotti and Nannucci, 2004, Chadwick and May, 2003, Ferber et al., 2003, Hagemann, 2002, Musso et al., 2000, Myles, 2004, Nugent, 2001, Olsson et al., 2003, Ranerup, 2000, Stevaert, 20001.

Initial evidence from in-depth case studies indicates that truly Deliberative E-Democracy implementations, with explicitly defined relationships to the actual decision-making processes, may increase the level of citizen participation, if compared to traditional means of political discussion between citizens and decision-makers. Stanley & Weare [2004] show that an increased number of citizens and new citizen groups became involved when a governmental organization developed web-based E-Docket service. Grönlund [2003] reports more than one thousand inputs in a municipal system developed for the purpose of discussing the municipal

development plan in Kalix, a small Swedish municipality. The "Ur'say" youth parliament in Scotland encouraged young people to participate in political discussions, in which the government representatives indeed take their input into consideration, and subsequently provide feedback on how this input affected their decisions [Macintosh et al., 2003].

Challenges

The digital divide between competent and less competent users of IT [Olsson et al., 2003], and the fact that only those already involved in traditional democratic practices tend to participate in E-Democracy [Scheufele and Nisbet, 2002], challenge the ideas of Deliberative Democracy. The general-level resistance of change in governmental and political decision-making structures [Klijn and Koppenjan, 2000, Nugent, 2001] challenges development of Deliberative Democracy as well, along with the administrative focus on resource distribution for managerial e-government issues instead of promoting new forms of democracy [Chadwick and May, 2003]. Research on usage [Scheufele and Nisbet, 2002] and service production on the Internet at the governmental [Chadwick and May, 2003] and state [Ferber et al., 2003] levels of administration has suggested a lack of interest in actual implementations of the Deliberative Democracy model, with similar observations concerning municipal websites [Musso et al., 2000, Myles, 2004] and party organizations [Gibson and Ward, 2002, Hagemann, 2002, Heidar and Saglie, 2003, Hoff et al., 2003].

Based on their experience from E-Democracy projects, some researchers conclude that any particular communication infrastructure, such as "the Internet", does not per se "promote" Deliberative Democracy without human-initiated policies for the use of technology for such purposes [Masters et al., 2004, Sæbø and Päivärinta, 2005]. However, a great proportion of experimental E-Democracy solutions remains disconnected from the decision-making process [Heidar and Saglie, 2003, Hoff et al., 2003, Myles, 2004, Tambouris and Gorilas, 2003]. Although politicians and decision-makers support E-Democracy experimentation, their enthusiasm might decrease when it becomes evident that the new means of communication changes existing power structures [Grönlund, 2003, Klijn and Koppenjan, 2000]. Consequently, Grönlund [2003] suggests that the supporters of Deliberative Democracy should have an intentional strategy to overcome possible reluctance of individuals to maintain the "managerial" (i.e. the Liberal) democracy model.

DIRECT DEMOCRACY

Characteristics

The Direct Democracy model represents a radical alternative to the representative models of democracy. In Direct Democracy, network-based groups and individuals take over the role of traditional institutions [Bellamy, 2000, Held, 1996, Lynne, 2004]. The idea of citizens participating directly in political decision-making originates from the classical Athenian ideas of democracy and participation in the polis-state, focusing on equal rights to rule and be ruled in turn by the collective of free male citizens [Held, 1996]. Direct Democracy focuses on how traditional institutions lose power in favour of network-based groups or individuals [Bellamy, 2000, Held, 1996, Lynne, 2004]. ICT plays a critical role in implementations where the Internet no longer represents a supplement to traditional communication channels, but instead a crucial precondition for democracy [Bellamy, 2000]. A direct E-Democracy initiative requires communication technology to support coordination among a great number of decision-makers, i.e. citizens, possibly geographically scattered, with diverse interests and backgrounds.

Missing implementations of direct democracy

Direct (cyber) democracy has been suggested as an ideal form of E-Democracy in a few theoretical sources [Bellamy, 2000, Lynne, 2004, Van Dijk, 2000]. Despite optimistic theorizing, the actual implementations of direct E-Democracy have remained rare [Aidemark, 2003, Heidar and Saglie, 2003, Myles, 2004, Netchaeva, 2002]. So far, we found no academic literature

concerning experiences from direct E-Democracy systems. However, at the level of local/municipal politics, examples of direct E-Democracy have started to emerge in the form of new www- (or Internet-) parties, e.g. in Sweden [Aidemark, 2003, Sæbø and Päivärinta, 2005]. This development seems to emerge especially due to new actors and citizen movements enriching the map of political parties, as the traditional party organizations seem to stick to their representational practices despite several trials of new communication media, e.g. in Norway [Heidar and Saglie, 2003] and Denmark [Hoff et al., 2003].

We were able to find two Swedish Internet-parties, Demoex (www.demoex.net) and Knivsta.nu (www.knivsta.nu), which have an explicit policy of involving the ideal of Direct Democracy in their internal decision-making processes. These parties also gained representatives, 1 and 4, respectively, to use political power in the municipal boards (in Vallentuna and Knivsta). Especially, the www-based communication tools are used as part of the decision-making process and actions taken by the party and its representatives. Explicitly defined communication systems affect the behaviour of the party representatives in the city council meetings and decision-making in Direct party democracy à la Demoex and Knivsta.nu. The representatives commit themselves to vote in agreement with the internal online voting results of the party, not according to their own wishes. Hence, the issue of identifying the user on the Web becomes an important prerequisite.

SUMMARY OF THE REVIEW

Table 2 presents the connection between our suggested framework, current literature on democracy models, and reported implementations on E-Democracy cases.

V. EXAMPLE: ANALYSING DISCUSSION FORUMS

To illustrate the explanatory potential of this framework we conduct an analysis of different discussion forums related to the suggested models of E-Democracy.

DISCUSSION FORUMS FOR PARTISAN DEMOCRACY

Many discussion forums have been set up by stakeholders not directly linked to existing political or decision-making structures in the society. The political Usenet discussion newsgroups [Hill and Hughes, 1998, Paolillo and Heald, 2002, Schneider, 1996] probably represent the first examples. In a few cases, web-based discussion forums have emerged as a channel for opposition groups in certain countries where conventional media dominates political discourse to express themselves. Examples include the newspaper-owned discussion forum, singtao.com in Hong Kong [Fung, 2002], and a discussion forum owned by the opposition's presidential candidate supporters, "Rohsamo," in South Korea [Moon and Yang, 2003].

Opposition to or independence from existing power structures is common in these examples. The impact of such discussion forums materializes mostly through pressure of visible public opinion [Fung, 2002, Schneider, 1996], but is sometimes also connected to elections [Moon and Yang, 2003]. After the success of "Rohsamo" in the South Korean presidential campaign of 2002, which promoted an oppressed oppositional movement to a main player in the representative democracy, few reports indicate a visible impact of such discussion forums and related E-Democracy systems. However, the existence of a public sphere alongside one-sided official truths of totalitarian or semi-totalitarian societies may already represent an indirect voice in decision-making. Fung's [2002] observations on professional pro-government writers indicate that in some cases the governmental forces cannot plainly ignore the "voice" of such forums.

Table 2. Summary of the review of E-Democracy

	Partisan Democracy	Direct Democracy	
Democracy models	No exemplary models identified	Classical [Held, 1996], Direct [Held, 1996, Lynne, 2004], Cyber [Bellamy, 2000], Libertarian [Van Dijk, 2000], Quick [Åström, 2001]	
Reported cases	Usenet discussions [Hill and Hughes, 1998, Paolillo and Heald, 2002, Schneider, 1996], Discussion forums [Fung, 2002, Moon and Yang, 2003], Network-based activities [Hurwitz, 1999], Policy study among citizens [Olsson et al., 2003], Discussion groups [Papacharissi, 2004], Political control [Rodan, 1998], Political talk [Stromer-Galley, 2002], Online forums [Tsaliki, 2002], Blogging [Griffiths, 2004, Macintosh et al., 2005]	icy No academic references identified, only few cal implementations; mainly Internet-parties.	
	Liberal democracy	Deliberative democracy	
Democracy models	Pluralism [Held, 1996, Van Dijk, 2000],	Dijk, 2000], Neo-Republican [Bellamy, 2000], Plebiscitary [Van Dijk, 2000], Deliberative [Gimmler, 2001], Strong [Barber, 1984, Åström,	
Reported cases	Discussion forum [Jensen, 2003, Ranerup, 2000, Rose and Sæbø, 2005], Governmental web sites [Cullen and Houghton, 2000, Weare et al., 1999], County web site [Ho and Ni, 2004], Internet's potential [Krueger, 2002], Bureaucracies' role [La Porte et al., 2002] Web system for parliaments [Marcella et al., 2002], Stages of e-government growth [Reddick, 2004], Candidate web sites [Ward and Gibson, 2003], Citizens as participators [Weber et al., 2003], Involvement of youth [Detlor and Finn, 2002, Finn and Detlor, 2002], Dialogue system [Aidemark, 2003, Biasiotti and Nannucci, 2004, Nugent, 2001], Design quality [Cullen and Houghton, 2000]	Dockets [Stanley and Weare, 2004], Discussion forum [Grönlund, 2003], E-citizens [Biasiotti and Nannucci, 2004], Interaction between states and citizens [Chadwick and May, 2003], State websites [Ferber et al., 2003], Discussion lists [Hagemann, 2002], Local web [Musso et al., 2000], Net development [Myles, 2004], Dialogue system [Nugent, 2001], Discussion forum [Sæbø and Päivärinta 2005, Ranerup, 2000, Rose and Sæbø, 2005], Policy study [Olsson et al., 2003], Online citizens [Scheufele and Nisbet, 2002, Steyaert, 2000], Interactive decision making [Klijn and Koppenjan, 2000], Parties [Heidar and Saglie, 2003], Decision making [Groper, 1996], Deliberation [Aidemark, 2003, Carvalho et al., 2003, Grönlund, 2003], Involving youth [Macintosh et al., 2003, Masters et al. 2004]	

DISCUSSION FORUMS FOR LIBERAL DEMOCRACY

Jensen [2003] describes a Danish experiment, Nordpol.dk, in which a county arranged a web-based discussion forum as a part of their digital services in connection with local elections. Nordpol.dk had no explicit connection with actual decision-making processes concerning the municipality, and the rationale for its implementation was strictly informative. There, the candidates tried to inform citizens about their arguments whereas the citizens tried to lobby for issues that seemed of significantly less importance to the candidates. Hence, Nordpol.dk represents the Liberal model, in which communication takes place mainly in connection with elections. The authorities define the purposes for communication beforehand and shape and control the debate (although moderately in this case). The dialogue's sole purpose before elections is to inform the citizens of the candidates' viewpoints and vice versa.

Ranerup [2002] and Rose and Sæbø [2005] describe almost identical cases in Swedish and Norwegian contexts: municipality-owned discussion forums of local issues within categories defined in advance. Ranerup [2002] denotes the need for politicians to participate in electronic discussion forums in order to facilitate their use. Rose and Sæbø [2005] describe a Norwegian case in which politicians and citizens were involved in a discussion forum during the elections and shortly after. They noted obvious differences between the assumptions of citizens vs. politicians regarding which democracy model should be pursued. Whereas most politicians used the forum to inform and be informed, a great number of citizens would like the forum to develop into a more Deliberative (or "neo-republican") form, in which the citizens and their representatives could continuously inform and be informed [Rose and Sæbø, 2005].

DISCUSSION FORUMS FOR DELIBERATIVE DEMOCRACY

Discussion forums involve citizens in the formation of public opinion. For example, the Federal Motor Carrier Safety Administration (FMCSA) in the U.S. used a web-based docket, together with a discussion forum, to gather citizen opinions about a long-term strategy for improving commercial motor vehicle, operator, and carrier safety [Stanley and Weare, 2004]. A Swedish municipality, Kalix, introduced a web site that included a discussion forum was used for debating targeted public matters as well as citizen influence on the city planning [Grönlund, 2003].

Such consultations via a discussion forum represent Deliberative democracy, where the politicians and officials are continually sensitive to the opinions from the field. Still, politicians and governmental organs remain responsible for initiating and defining the actual topics discussed. The difference between the general-level debate and the targeted efforts to use discussion forums resides in the fact that here the citizens have a good reason to expect their voices to be heard concerning a particular matter. That is, the relationship between communication through the discussion forum and the actual decision-making processes here appears as explicit (or, at least, more explicit) compared to the discussion forums described in [Jensen, 2003, Ranerup, 2000, Rose and Sæbø, 2005].

DISCUSSION FORUM FOR DIRECT DEMOCRACY

In Knivsta, Sweden (http://www.knivsta.nu/), a newly established local party (knivsta.nu) uses a forum for discussion and decision-making as an important part of the party organization. The party got 11.5% of the votes in the local elections in 2003 and 4 representatives in the municipal council. The Internet-party in Knivsta explicitly seeks to "complement the representational democracy with Direct democracy" at a party level. The democracy idea (www.knivsta.nu) explicitly states that the representatives will not only act on their own viewpoints, but in accordance with the informed viewpoints from the citizens / members. The discussion forum and occasional e-voting play an important role in this process. In the www-site of the party it remains slightly implicit whether and how the discussions truly affect the representatives' behaviour in the municipality council. Still, the discussion forum and occasional e-voting represent a direct channel to affect the representatives of this party, as they are active with regard to the site and the discussion forums. Together with other solutions, such as e-mail lists and e-voting mechanisms, such use of discussion forums approaches Direct Democracy, where the citizens online affect the decisions made.

SUMMARY OF THE ANALYSIS

The explanatory potential of the four idealised democracy models can be illustrated by a summary of the discussion forums (Table 3). By looking at the main purposes of discussion forums for different democracy models we illustrate how the framework can be used to identify differences in how a particular technology may work under different conditions (democracy models).

Table 3. Analyses of Discussion Forums in Light of the Framework

	Partisan Democracy	Direct Democracy
Citizens set the agenda	Discussion forums are channels for expressing opinions by citizen groups often criticizing existing power structures. No explicit connection to existing governmental or political decision-making processes is defined beforehand. Citizens set the agenda for public discussion but not for decision-making. ICT seeks to obtain visibility for alternative political expressions uninterrupted by political elite.	raise issues and affect decisions. The citizens are online affecting the decisions to be made (mostly at the local level). Citizens set the agenda both for public discussion and
	Liberal Democracy	Deliberative Democracy
	The candidates inform citizens about their arguments whereas the citizens try to lobby the candidates. The purposes of communication are defined beforehand by the authorities,	l'. '
Government (politicians and officers) sets the agenda	The democracy is regarded as occurring after the citizens have been informed about the candidate viewpoints, and vice versa, before the elections, and about the decisions made in between.	The citizens have a good reason to expect that their voices are heard concerning a particular matter initiated by the government. ICT is developed for increased citizen
	ICT seeks to improve the amount and quality of information exchange between government and citizens.	participation and involvement in decision-making processes.
	Citizens mainly implicitly included in decision- making processes	Citizens have an explicitly defined role in decision-making processes

VI. DISCUSSION

In this section we first address the need for the Partisan model. Secondly, we address the opportunity to unify ideals from different models so they remain dynamic over time and discuss the suggested framework's use and usefulness. We discuss also the practical implications and limitations of this research.

PARTISAN DEMOCRACY MODEL

The review showed a gap between the reported cases and the theoretical discussions on various democracy models. Under the Partisan E-Democracy model, the main challenge is to create a movement which would involve the audience and facilitate evolution of emerging arguments. Partisan E-Democracy implementations have the greatest influence in situations where alternative arenas for expressing political viewpoints are absent or difficult to access. Citizen participation can be increased both by addressing a common objective and also by addressing the existence of contradictory views in the political debate and cultivating such contradictions to crystallize the standpoints of the participants. Any implementation of Partisan E-Democracy should facilitate free and independent debate. Third party opportunities to monitor and flame the

discussions need to be carefully scrutinized and balanced to maintain the credibility of such arenas.

In the field of Partisan E-Democracy, a few popular arenas are already implemented in the context of also other dimensions of human life, making E-Democracy a part of people's everyday communication space instead of introducing stand-alone solutions to be specifically accessed. For example, the Usenet attracts people to discuss any matter under the sun and the Singtao forum [Fung, 2002] is run by a commercial newspaper, which includes other news and information services.

COMBINATION OF DIFFERENT MODELS

The analyses of reported system implementations identify a lack of examples of direct E-Democracy. Although an extensive theoretical discussion about direct E-Democracy is identified, our review calls for more empirical research. On the other hand, direct E-Democracy should by no means be expected to represent the ultimate end-result of E-Democracy projects as suggested in theory, since the majority of implementations support less radical democracy models.

In fact, in a democratic society, solutions that would support all four E-Democracy models simultaneously should perhaps exist. The parallel existence of all the models may be necessary to ensure a dynamic balance between a democratic development process and the practical governance of public matters. For example, without any operational decision-making by politicians and officers (Liberal E-Democracy), inefficient governance will appear since all citizens cannot practically express their opinions on each matter or receive an overview of the consequences of their decisions. Increasing attention to Deliberative E-Democracy would make the representatives more accountable for their decisions between election periods, concerning matters of wide public interest. Without any means for Partisan E-Democracy, new or minority viewpoints might remain unexpressed. Finally, new technologies would make it increasingly possible for each citizen to participate in actual decision-making (Direct Democracy). Whether this is largely desirable should be thoroughly scrutinized, as some political theorists hold that citizens are not always capable of deciding their own good. In light of our framework, however, any stakeholder of E-Democracy could now identify the purposes and value assumptions beneath a particular solution more explicitly.

USE AND USEFULNESS OF THE SUGGESTED FRAMEWORK

Our framework of the four democracy models represents a means for seeing E-Democracy technologies and development of the society as a mutually dependent and dynamically emergent phenomenon. Hence, we subscribe to an established line of IS theorizing that, in general, warns against viewing any application of IT as a deterministic tool, orientating instead towards analysis of structural processes in which technologies and organization contexts (and, in this case, societies) develop in an interwoven manner [Markus and Robey, 1988, Orlikowski, 1992, Orlikowski and Iacono, 2001]. Our analysis of discussion forums in light of the four democracy models addresses this issue: the need to discuss societal values and ambitions in connection with the development and use of a particular technology in a particular democratic context instead of seeing technology – let alone democracy – as a generic "black box." A particular communication medium can be effective in more than one particular model of E-Democracy. Use of the framework to analyse particular implementations can reveal the democratic ideas beneath the surface, and address particular ways to use a technology according to the pursued democracy model. Hence, we believe that the framework adds value to structural analysis and understanding of IT use [Orlikowski, 1992] in the field of E-Democracy.

Following this theoretical argumentation, we can now use the framework to criticize research designs and phrasings that generally study, for example, "the impact of the Internet," or other particular factors of technology to "democracy" or "citizen participation/mobilization" without specifying the democracy model pursued [Gibson and Ward, 2002, Scheufele and Nisbet, 2002,

Weber et al., 2003]. Hence we address some of the voices sceptical about E-Democracy in general, such as Scheufele and Nisbet [2002] who draw conclusions based on Deliberative ideals, still studying only particular E-Democracy implementations within the Liberal model, without taking into account that the Liberal political ideology does not promote the adoption of Deliberative E-democracy [Weare et al., 1999] in the first place. That is, critique on the potential of Deliberative E-Democracy in light of an analysis of implementations of Liberal E-Democracy seems not particularly convincing. By using our framework to make distinctions among the particular values behind particular E-Democracy solutions from the beginning, a critique could be better focused and crystallized. For future empirical research on "the impact of Internet" or "enhancing citizen participation by E-Democracy" we will argue that the democracy ideals and particular IT applications included in any study need to be specified explicitly, before drawing general-level conclusions about those issues.

Empirical research on E-Democracy has focused mainly on Liberal democracy, transformed or revised for the web. However, an increasing number of reports on E-Democracy applications for Partisan Democracy and Deliberative Democracy emerge. The implementations of Direct E-Democracy are still in their infancy. Only few pioneering experiments of minor political importance have started to emerge. In fact, it is said that the Liberal model of democracy generally discourages experimentation on new forms of E-Democracy [Weare et al., 1999]. Hence, our review indicates that the new forms of E-Democracy should be researched with proactive research methodologies in particular contexts, such as in innovative party organizations and citizen movements, instead of drawing hasty conclusions about the potential of new E-Democracy models based on surveys of the *current* popularity of dominating E-Democracy implementations.

We suggest that research strategies, such as design research and action research, [Hevner et al., 2004, Lindgren et al., 2004] could be applied more systematically in order to report experiences from different contexts and thus accumulate knowledge in the field. Design research for E-Democracy can apply to existing knowledge, suggesting and experimenting with new solutions and media for a particular model of E-Democracy. Action research initiatives could adopt suggested implementations to real-life pilot environments and collect further experience in collaboration between researchers and practitioners. Although such co-operation has been launched in a few areas where the academics have suggested solutions for E-Democracy, e.g. in Scotland [Macintosh et al., 2005, Macintosh et al., 2003, Macintosh and Smith, 2002], few researchers in the field still consciously apply the principles of design research and action research. Experiences are reported more vaguely in "case studies," plainly describing what has been done without rigorous connection to previous experiences or theory on the field.

IMPLICATIONS FOR PRACTICE

From the practical viewpoint, our review indicates that E-democracy implementations need to be holistically considered from the viewpoint of the political and decision-making context as a part of the larger issue of democratization in society, not as a target for development in itself. Unless new communication practices are made official, let alone recognized, by the key stakeholders such as politicians and citizens, the development may have little impact. Traditional communication channels and E-Democracy will continue to exist side by side. So far, an incredibly high number of E-Democracy applications have been left without explicit connection to the traditional democratic communication and decision-making processes.

Practitioners should be also aware that the different stakeholders of E-Democracy may actually have different ideas and ideals of democracy, which may affect the use of certain E-Democracy applications. In light of the framework, these differences could be taken into account by the practitioners who may want to choose to promote a certain kind of E-Democracy. Based on the suggested framework, any implementation of E-Democracy can be specific about the actual democracy model pursued in a particular initiative.

LIMITATIONS

Concerns about the validity of our conclusions can be raised. First, there is the question of overlooking research relevant to our conclusions which was not indexed in search engines or captured by our iterative collection of research reports. For example, we have restricted our review to English-language outlets, which may reduce the diversity of topics and the coverage of the geographical areas studied. One should be careful in this regard to view our collection of the literal sources as a holistic representation of the whole E-Democracy field. Second, the research methods in the selected literature varied, which provided challenges to comparison when the findings were aggregated. Third, academic rigour of the reviewed papers was less emphasized in our selection of the sources (except for the rejection of articles without references to other research. By including items such as conference proceedings the quality of the selected articles may vary greatly. When choosing between better quality (by only investigating journal articles and book chapters from prestigious publishers) or greater quantity of contributions (by including conference proceedings) the latter was selected. However, in this young field the number of contributions published in good quality journals is still limited, making a review restricted to this literature difficult. Within these limits we still believe that our review results in a constructive basis for the current state of the field, contributing to the theoretical means of analysing IT use in the field of E-democracy, accumulating findings, and pointing to implications for research and practice.

All in all, we argue that our framework provides an integrated basis for research efforts to understand IT use for E-Democracy. Experience from further E-Democracy cases can now be reported in relation to particular democracy ideals present in the context of the implementation. However, more efforts need to be directed at building up a dynamic experience base to discuss the particular E-Democracy genres further. Our analysis of discussion forums illustrates how one technology works differently, addressing a need to explain the differences. Particular communication patterns and their combinations in particular E-democracy contexts should be scrutinized in more detail in order to discover more detailed lessons in the implementation of particular democracy models. Moreover, experiences related to the development processes and promotion of E-Democracy should be more systematically collected and reported.

VII. CONCLUSION

We introduced a framework for E-Democracy which integrates theoretical and empirical literature in the field. In the framework the idea of Partisan Democracy contributes to the previous frameworks of E-Democracy. Our contribution responds to the call for more theory-building in the field [Andersen and Henriksen, 2005, Grönlund, 2004]. Empirical research on E-Democracy is a scattered field of experiments lacking solid theoretical foundations, let alone cumulative knowledge that would guide research and practice forward. Our review shows how studies of IT use for E-democracy can be categorised to collect such knowledge. Attempts towards Liberal, Deliberative, and Partisan E-Democracy were more or less represented in the empirical academic literature. Despite the theoretical urge for Direct E-Democracy, examples of real-life applications were practically absent in the academic literature. Some pioneering examples could, however, be found from the practice. On the other hand, the Partisan model of E-Democracy was rarely discussed in the theoretical literature.

Our main argument addresses the need to be specific about the actual democracy model to be pursued in connection with IT uses for E-Democracy. It makes little sense to discuss any particular medium or technology of E-Democracy in general, unless the actual democratic ideals and particular communication forms and purposes supporting those ideals are explicitly defined in context. For future empirical research, we argue that the democracy ideals should be explicitly stated in analysis of IT use for democratic communication and decision-making.

We suggest further efforts to collect knowledge on E-democracy in proactive research tightly connected to practice, in which particular technologies could be tested under explicitly stated democracy models; especially in connection to hitherto less proven Direct Democracy, but

perhaps also in connection to varying opportunities to operationalise the deliberative and partisan models of democracy. As new communication technologies and people's communication preferences are constantly evolving, the importance of such work will not decrease in the foreseeable future. Our framework provides a general-level framework for categorizing such knowledge and helps explain differences in IT use under different democratic ideals.

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Editor's Note: The following reference list contains hyperlinks to World Wide Web pages. Readers who have the ability to access the Web directly from their word processor or are reading the paper on the Web, can gain direct access to these linked references. Readers are warned, however, that

- 1. these links existed as of the date of publication but are not guaranteed to be working thereafter.
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APPENDIX I. E-DEMOCRACY MODELS IN RELATION TO PREVIOUS LITERATURE

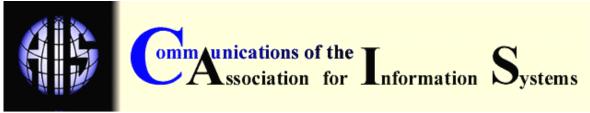
	Democracy models	Main characteristics	
Liberal E-Democracy	Liberal and developmental democracy [Held, 1996]	Representative government where citizens are involved via voting, as representatives at the local level and participants in public debate.	
	Aggregative democracy [Eriksen and Weigård, 1999],	Politics is a fight between conflicting individual interests. Politicians are responsible for aggregating elector interests as they occur via elections.	
	Pluralism democracy [Held, 1996, Van Dijk, 2000]	Competitive electoral system with at least two parties secures government by minorities and political liberty. Citizens have the right to express their ideas, vote and organise.	
	Competitive Elitist democracy [Held, 1996]/ Demo elitist democracy [Bellamy, 2000]	Elected parliaments are the basis for the democracy. Experts representing (or claiming to represent) different interests in society act in policy networks. These political experts represent the elite, which are intensively involved in the formation of policy and definition of the public services.	
	Legalist democracy [Held, 1996, Van Dijk, 2000]	The majority principle protects individuals from arbitrary governments. Effective political leadership is guided by Liberal principles, and there is a minimum state intervention in civil society and private life.	
	Consumer democracy [Bellamy, 2000], Thin democracy [Aaström, 2001]	The main democratic value resides in the citizen's right to service. The model seeks to re-focus democracy around the efficient provision of public services. Competent consumers need to be well-informed; implying an important role for information and communication systems through which politicians inform citizens.	
Deliberative E-Democracy	Participatory democracy [Held, 1996, Pateman, 1970, Van Dijk, 2000]	Equal rights can only be achieved in a participatory society which fosters a sense of political efficacy. A knowledgeable citizenry is capable of taking sustained interest in the governing process. Less power to bureaucracy in favour of more involvement by the citizens.	
	Neo-Republican democracy [Bellamy, 2000] / Plebiscitary democracy [Van Dijk, 2000]	Citizens are regarded as active, especially at micro- and local levels. The model has radical assumptions on shared social rights and responsibilities, where revitalization of civic spirit is a central objective. ICT facilitates an increased number of participants, high-quality discussion and social inclusion in decision-making.	
	Deliberative democracy [Gimmler, 2001], Strong democracy [Barber, 1984, Aaström, 2001]	Highlights the role of open discussion, the importance of citizen participation, and the existence of a well-functioning public sphere.	
Partisan E-Democracy		No theoretical contributions identified.	
Direct E-Democracy	Classical democracy [Held, 1996]	Citizens had political equality and were free to rule and be ruled in turn. Main decisions were made by all in the assembly with sovereign power. Citizens were admitted to participate in politics focusing on society, not individuals.	
	Direct democracy [Held, 1996, Lynne, 2004]/ Cyberdemocracy [Bellamy, 2000]	A radical alternative compared to the traditional democratic institutions and features. Traditional institutions lose power in favour of network-based groups and individuals. ICT no longer represents a supplement to traditional communication channels, emerging as a crucial pre-condition for democracy.	
	Libertarian democracy [Van Dijk, 2000], Quick democracy [Aaström, 2001]	Emphasises the autonomous politics by citizens in their own associations using the horizontal communication capabilities of ICT. Traditional institutions is, in the most extreme application, put aside by politics created in networks.	

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