



## eParticipation

### *Designing and Managing Political Discussion Forums*

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## Abstract

eParticipation is the extension and transformation of participation in political deliberation and decision-making processes through information and communication technologies (ICTs). The most commonly found examples of eParticipation systems are political discussion forums. Although much of the discussion of these technologies is conducted in the eGovernment and eDemocracy literature, political discussion forums present a distinct set of design and management challenges, which relate directly to information systems concerns. In this article, we use the overview model of eParticipation of Sæbø, Rose, and Flak to structure a critical review of the existing literature to identify key challenges for designing and managing political discussion forums. We offer a contribution to theory in the form of a descriptive model of political discussion forums in their social context, based on a literature review of relevant literature. The explanatory potential of the model is illustrated by analyzing D:mo, a Norwegian political discussion forum. Based on the review and the case study, we offer a contribution to practice by suggesting a set of guidelines for the design and management of political discussion forums.

## Keywords

eParticipation, political discussion forums, case study

## Introduction

eParticipation involves “the extension and transformation of participation in societal democratic and consultative processes, mediated by information and communication technologies (ICTs)” (Sæbø, Rose, & Flak, 2008). It responds to a perceived decline in political engagement, a disconnection between citizens and their elected representatives, and a consequent decline in the legitimacy of political institutions. ICT and particularly Internet technologies are often considered a potential solution to these problems—offering new possibilities and opportunities for political participation. Governments therefore sponsor eParticipation initiatives that seek to improve citizen engagement in

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the political process. Chadwick (2003) reports that these democratic initiatives are seriously neglected in favor of managerial initiatives, which concern more traditional attempts to modernize and make more effective government services and administration. eParticipation initiatives are often intended to result in social value (for example, greater citizen engagement in the political process)—social rather than economic capital. They have therefore been difficult for policy makers to prioritize and little researched in comparison to mainstream eGovernment.

eParticipation efforts can take many forms, described (by Tambouris, Liotas, & Tarabanis, 2007) as eInforming (informing citizens), eConsulting (limited input from citizens on a defined topic), eInvolvement (development of open communication processes between government and citizens), eCollaboration (participation in development of policy alternatives and solutions), and eEmpowerment (transfer of control over policy to citizens). There are many ways of participating in the political process, and a variety of technologies have been used to help with these initiatives—including discussion forums, blogs, wikis, chat rooms, geographical information systems, decision support systems, voting systems, and web and podcasts, in addition to the standard web site and e-mail services routinely provided. There are some extremely successful examples of eParticipation initiatives. *Desirs d'avenir* (<http://www.desirsdavenir.org>) was the official web site for the campaign of Ségolène Royal, the socialist candidate to the 2007 French presidential election. Citizen democracy was an important element of her manifesto, and the site combines traditional campaign material with discussion forums and blogs. It attracted more than 150,000 contributions, with an average of 50,000 visitors a day and about 14,000 blogs. Other examples of European good practice include the participatory budgeting system of Berlin-Lichtenburg (<http://www.buergerhaushalt-lichtenberg.de/index.php>), the Scottish ePetitioner system (<http://epetitions.scottish.parliament.uk/>). Although no comprehensive evaluation of eParticipation projects exists, it is also clear that many initiatives are very much less successful. Many efforts fail to attract widespread interest among citizens or politicians (perhaps the majority), are unrepresentative (Dahlberg, 2001; Schneider, 1996), lead to poor information (Koch, 2005) or poor quality of debate (Hagemann, 2002), are monopolized by a few vocal contributors (Hagemann, 2002), or have security and trust issues—particular for eVoting systems (Oravec, 2005; Xenakis & MacIntosh, 2005).

At the heart of every eParticipation project is an information system—understood here as a technical system inextricably embedded in a social process. An eParticipation initiative can therefore be understood as an information system, accompanied with design and management challenges. The net-based technical systems have much in common with eGovernment and eCommerce systems (but also their own peculiarities), system users are normally dispersed, as with many web systems, there are design decisions, programming, interface, and usability problems and implementation, marketing, diffusion, and management issues. The social systems that the technical systems are embedded in reflect societal structures, the distribution of political power, the psychological makeup of citizen-users, and the organizational conditions of government institutions. Design and management decisions concerning these complex sociotechnical issues contribute to the success, or failure, of the initiatives.

In this article, we focus on the most common government-sponsored eParticipation initiative: the political discussion forum. Although the technologies that these systems are built upon (discussion forum, chat room) are well established, successfully enabling a politician discussion on the net is far from easy. Development and management issues are investigated by adapting the characterization of eParticipation of Sæbø et al. (2008). We discuss what can be learned about these issues from the existing literature and develop a descriptive theoretical model of a political discussion forum in its social context. We use the model to analyze “D:mo,” a Norwegian political discussion forum. We further provide a set of guidelines for the design and management of political discussion forums, based on the descriptive model and the case study.

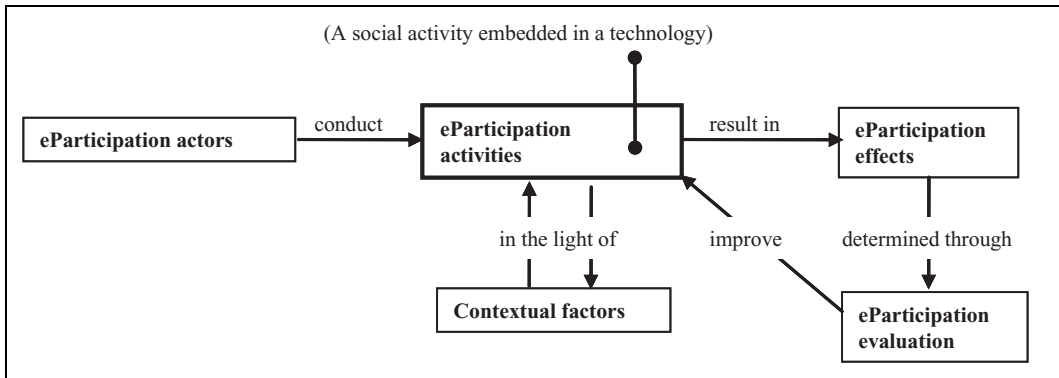


Figure 1. eParticipation (adapted from (Sæbø et al., 2008))

### eParticipation Overview

In this section, we develop an initial account of eParticipation based on the description by Sæbø et al. (2008; Figure 1). eParticipation is conceptualized as a sociotechnical system with five elements.

*eParticipation activities* involve a social activity or practice and its associated technology. The practice is usually a familiar political or democratic activity (such as voting, attending a political meeting, petitioning) embedded in an enabling technology (electronic voting system, net-based discussion forum, net-based petitioning system). The social process and the technology are understood as inseparable in practice. The technology facilitates or mediates the practice and may also contribute to changing it.

eParticipation activities are conducted by *eParticipation actors*. These include two important groups of stakeholders: those who design and manage the technology and those who use it. Design and management is here used as shorthand for all the varied tasks involved in conceptualizing, designing, realizing, implementing, rolling-out, engaging users, administration, and improvement of the technology system and its associated political process. Government officials and software developers often play important design and management roles in the types of eParticipation activity we consider in this article. The principle users of the system are citizens and politicians.

Design, management, and use of eParticipation systems are always carried out in *particular contexts*. These indicate external environmental factors that are structural—thus hard to influence—but are nevertheless important for the outcomes of the activities. Examples of these contextual factors are Internet access (which limits the reach and range of the activity) and technology literacy (which affects who can participate effectively). These contextual factors can affect many design and management decisions.

eParticipation activities lead to *outcomes or effects*. These effects can include improved engagement in the democratic process, better quality of political deliberation, inclusion of marginalized groups of citizens, and transfer of elements of policy making to citizens, among many others. Finally, the effects are *evaluated*, either formally (by scientists) or (more often) informally, and the consequent learning fed back into improving the eParticipation activities.

The model focuses on, and structures, consideration of many of the important features of eParticipation and could act as a starting point for research on eParticipation, representing a preliminary account of the field to help relating research and establish a cumulative eParticipation research account (Sæbø et al., 2008). The model represents the eParticipation area in general and is used in this article as an analysis tool both for an examination of the literature concerning political discussion forums and for discussion of the “D:mo” case, to develop a model more specifically addressing the use of discussion forum for eParticipation purposes.

## Political Discussion Forums as eParticipation Tools

In this section, the model is discussed in light of current research literature in the field. Searching for relevant articles in three major library databases (ISI Web of Science, EBSCO host Electronic Journals Service, and IEEE Xplore digital library) and relevant conference proceedings resulted in a library consisting of 651 references. Based on a selection strategy, 131 of these were considered highly relevant to eParticipation and represent a core sample of eParticipation research (see Sæbø et al. [2008] for more detail on the selection strategy). These 131 papers, and additional papers published later, were scanned by to identify articles focusing on political discussion forums.

### Activities

Design and management of discussion forum activities pose challenges, even though some of the technologies used are well understood. These can involve the issues of *policy making*, *feedback*, *moderation*, *design*, and *identity control*.

Particularly important is the relationship of the discussion forum with the political process, involving interpretation of participation results and their dissemination into the political process, influence on policy making, and feedback mechanisms. Discussion forums can thus be used as an interactive channel for *policy making* (Bekkers, 2004). Although still in its infancy (Biasiotti & Nannucci, 2004), the objective is to support citizens and government in an interactive policy-making relationship (Janssen & Kies, 2005).

Interactive policy making can be described as a way of policy-making in which citizens, societal organizations, companies and other government organizations in an early stadium are involved in the policy-making process in which different, and often competing, definitions of the problem and of possible solutions are explored in an open debate. (Bekkers, 2004, p. 194)

Several motives can be discerned for interactive policy making, including involving (otherwise disenfranchised) young people (Macintosh, Robson, Smith, & Whyte, 2003), bridging the cleavage between politics and administration, achieving acceptance for policies among relevant stakeholders, and enhancing the quality of policy formulation (Bekkers, 2004). Because messages concerning policy making sent by online participators mirror those sent by off-line participators, Best and Krueger (2005) argue that policy will not necessarily change dramatically. Nor will the proportion of active citizens necessarily increase. Still, interactive policy making may upset prevailing relationships within policy networks and introduce new voices into policy making (Stanley & Weare, 2004). Papacharissi (2004, p. 194) argues that the effects are questionable:

The expression of political opinion online may leave one with an empowering feeling. The power of the words and their ability to effect change, however, is limited in the current political spectrum. In a political system where the role of the public is limited, the effect of these online opinions on policy making is questionable.

Discussions forums are often understood as a communication channel intended to support *direct feedback* channels to political institutions (Papacharissi, 2004; Sæbø & Päiväranta, 2005). Discussions are most commonly seen as opportunities for citizens to give feedback to bureaucracies (Ainsworth, Hardy, & Harley, 2005), politicians (Papacharissi, 2002), political institutions (Papacharissi, 2004) or, more generally, policy makers (Biasiotti & Nannucci, 2004) or decision makers (Sæbø & Päiväranta, 2005). Papacharissi (2002) argues that the ability to provide politicians with direct feedback does not guarantee any influence on policy formation. A project where citizens' feedback to politicians did make an influence is explained by its timing: inputs were given in time for decision

makers to incorporate this feedback into their discourse (Seaton, 2005). Participants were thus able to see how their contributions influenced the parliamentary process. Similarly, Macintosh et al. (2003, p. 45) describe how young people receive feedback:

After a debate is closed, feedback is provided about the outcomes: who the young people's contributions have been passed on to and any action taken. The debate, including the complete comments and any background information provided, is then publicly archived on the web site.

The level of *moderation* may influence the nature of communication, for example the quality and/or quantity of activities. Moderation may have considerable influence on the topics and discussion and can limit the role of dissenting voices (Ainsworth et al., 2005). It can restrict ownership of agendas and decentralized definition of topics (Janssen & Kies, 2005). Moderation may be extensive or limited to handling potentially explosive discussions (Carlitz & Gunn, 2002) or to considering underlying terms and conditions (Stanley & Weare, 2004). Jensen (2003) argues that quality of argumentation can be improved by a high level of active moderation.

Despite a common agreement that the *design* of the discussion forums influences the participation activities (Aikens, 1998; Carlitz & Gunn, 2002), design considerations are little researched. Discussion categories can be predefined or established dynamically. Predefining the categories directs and focuses discussions as long as the participants feel that they are relevant (Ranerup, 2000; Rose & Sæbø, 2005). Janssen and Kies (2005, p. 321) consider the question of synchronous or asynchronous dialogue:

It is fundamental to distinguish the real-time discussion spaces (chat rooms) from the asynchronous online discussion spaces that do not have time constraints (email list; newsgroups; Bulletin boards; forums). It is generally recognized that the former are spaces of encounter that attract 'small talk' and jokes, while the latter constitutes a more favourable place for the appearance of some form of rational-critical form of debate since it allows participants to spend more time to think and justify their interventions.

*Identity control* is also discussed. Anonymity of contributors can be challenging for the proponents of rational debate by heightening the level of extremist and hate speech (DiMaggio, Hargittai, Neuman, & Robinson, 2001). Koch (2005) argues, however, that anonymity can improve the quality of debate by removing markers such as age, sex, and race and consequently subjective interpretations of the arguments based on these markers. Identify control may increase the entrance level (by requiring some kind of registration) but may also imply an obligation to participate and respond.

## Actors

*Politicians* and *citizens* are two major actor groups participating in the discussions, and the relation between these groups is widely discussed (Chadwick & May, 2003; Hudson-Smith, Evans, & Batty, 2005).

*Politicians* are rarely the main focus of attention and are usually analyzed as a group (Conhaim, 2000; Howard, 2005; Rushkoff, 2004). Two exceptions are Jensen (2003), who argues that the presence of individual politicians was a major reason for success achieved in a discussion forum, and Sæbø and Päivärinta (2005), who discuss the importance of addressing politicians specifically (as well as citizens) when designing online discussion forums. The central tenet in politics is the ability to shape society based on a particular notion of an ideal (and just) society (Held, 1996). The shaping of society is largely done by controlling government spending, that is, allocating budgets to promote particular directions on societal development. Public spending can be given further directions through the development of policy and guidelines that administrations

are instructed, or inspired, to carry out. Additionally, politicians may shape society through laws and regulations (Held, 1996).

*Citizens* are often discussed in relation to other stakeholder groups, focusing for example on the interaction between citizens and politicians (Chadwick & May, 2003; Hudson-Smith et al., 2005), on how participation varies between these groups (Clift, 2000), and on their specific roles (Hudson-Smith et al., 2005). Politicians and citizens may share an interest in dialogue and discourse leading to the formation of political opinion. Active citizens may not only try to influence through traditional channels or solely through elected representatives but they also seek to influence the political process (DeLuca & Peeples, 2002; Schneider, 1996; Siapera, 2004, 2005) by using technological means to promote their interests, such as political discussion forums (Päivärinta & Sæbø, 2006). Citizens can act as information providers in a discussion, where the traditional roles of politicians as decision makers and citizens as voters are not challenged (Päivärinta & Sæbø, 2006). Citizens may be asked to submit suggestions to public authorities (Aidemark, 2003), dialogue may be initiated for the purpose of teaching inhabitants how to become e-citizens (Biasiotti & Nannucci, 2004), or citizens can be given the opportunity to communicate with representatives and government officials (Nugent, 2001).

Citizens' input can also be more directly connected to decision-making processes (Held, 1996; Pateman, 1970). Gimmler (2001) emphasizes the role of open discussions in a well-functioning public sphere, where politicians and citizens share a common interest in dialogue and the formation of political opinion. In this form of representative democracy, discourse between citizens and politicians continues to legitimize existing power roles.

Direct democracy, in contrast, invokes the idea of citizens as decision makers. However, examples of discussion forums that support direct democracy, where citizens both set the agenda and make enforceable decisions, are rare (Päivärinta & Sæbø, 2006). These rare discussion forums support citizens as direct decision makers, representing direct channels to 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 decision making (Päivärinta & Sæbø, 2006).

### Contextual Factors

Several contextual factors influence discussion forums, including *political culture*, *administrative level* (local, regional, or national), *accessibility*, *user competence*, and *ownership*.

Differences in political participative cultures influence online debates (Janssen & Kies, 2005); furthermore, the engagement of citizens requires the development of a critical and deliberative *political culture* (Biasiotti & Nannucci, 2004), where citizens are invited to take part in discussing politics to influence the decisions being made. Callanan (2005) argues that cultural change is necessary before citizens are willing to take ownership of local policy making and that education and training should be provided for the Internet services (Callanan, 2005). Päivärinta and Sæbø (Päivärinta & Sæbø, 2006) illustrate how discussion forums using similar technologies achieve different results because of the differing cultural assumptions of their users. Genuine deliberative dialogue cannot be achieved if politicians do not engage in online discussions, or citizens act as passive consumers of government (Päivärinta & Sæbø, 2006).

Discussion forums for eParticipation purposes are, with few exceptions, implemented at the local *administrative level*. Discussion forums can, according to Biasiotti and Nannucci (2004), lead to improved local participation. Local political discussion forums focus on political issues directly related to citizens concerns (Rose & Sæbø, 2005). Biasiotti and Nannucci (2004) argue that it is difficult to generate engagement in more general political discussions, which may be why discussion forums are less often implemented at the regional or national level.

Access to technology (*accessibility*) is a major factor affecting the democratic potential of Internet (Ranerup, 1999). Resources such as Internet connection speed and access may influence online political engagement (Best & Krueger, 2005; DiMaggio et al., 2001). Pessimistic accounts argue that, because individuals have unequal access to technology (based on location, gender and class), eParticipation services (like discussion forums) will tend to be dominated by citizen groups already privileged in the democratic discourse (Ainsworth et al., 2005; Jensen, 2003; Papacharissi, 2002). A more optimistic perspective suggests that, as access is granted to more citizens, participation will follow (Ainsworth et al., 2005) and engagement in online activities will increase (Best & Krueger, 2005). However, Best and Krueger (2005) found no statistical relationship between Internet access and broadband and online political activity. Challenges concerning accessibility are not restricted to technical accessibility concerns (computer and broadband) but also to costs (Olsson, Sandstrom, & Dahlgren, 2003), language (knowledge of English; Olsson et al., 2003), and access not only to policy information but also to operational data (to check calculations and arguments put forward in a policy program; Bekkers, 2004). Norris (2001, p. 5) takes a balanced view of the prospects for inclusion through eParticipation:

The digital divide in the early years of adoption hinders social diversity, but the normalization of the Internet population in America as access spreads more widely, should also promote greater inclusiveness for poorer and less educated sectors as well as for women and ethnic minorities. The lack of barriers to entry means that once social groups are online, most virtual communities are fairly permeable to new members.

*Ownership* may influence the activities taking place, because technology effects are found not to reflect its inherent potential but active choices based on owners' perceived interest and cultural norms (DiMaggio et al., 2001). Government-sponsored sites are, by default, assumed to be owned by government, but partial transfer of ownership to citizens can result in greater trust (Callanan, 2005). It can be encouraged by including citizen groups in the design and development of the system (Macintosh et al., 2003). Bekkers (2004) argues that it is important both to include citizens and other stakeholders in the initiating phases and to design for self-organization of the online content (Bekkers, 2004; Sæbø & Päivärinta, 2005).

*User skills and competences* are found to be prerequisites for well-functioning discussion forums (DiMaggio et al., 2001; Olsson et al., 2003). Necessary competences include basic information technology (IT) skills (Olsson et al., 2003), the ability to understand the rationale behind the technology (Ranerup, 1999), and the ability to screen and interpret large amount of online information (Stanley & Weare, 2004). Because such competence is unequally distributed through society, discussion forum projects run the risk of attracting technophiles, more interested in appearance than function (Macintosh et al., 2003), or making the information rich richer (Stanley & Weare, 2004). Training and education is often necessary to increase participation (Biasiotti & Nannucci, 2004; Olsson et al., 2003).

## Effects

Discussions forums are launched with ends in mind such as more (or better) *deliberation, increased responsiveness, introduce new voices in policy-making discussions, increased participation, better quality on argumentations, political impact*, or, in a more cynical perspective, to *enhance surveillance and control*. Moreover, discussion forums are launched without any clear ideas of what to achieve, where objectives are not clearly thought through nor made explicit to potential users (Rose & Sæbø, 2005), which is illustrated by the D:mo case reported below.

Potential effects on democracy are discussed in the literature. Some see discussion forums as a democratic force promoting *deliberation*, by open debates and allowing multiple perspectives,

whereas others argue that enhanced government *surveillance and control* will occur, widening the gap between the powerful and the powerless (Ainsworth et al., 2005). Where some focus on the potential to *increase participation* and reshape the state as an interactive organization (Chadwick, 2003), others argue that absent discourse and dialogue undermine the potential to influence democratic practice (Koch, 2005). Participative structures could even be counterproductive in a representative democracy:

... do new participative structures make voting appear to be even more irrelevant than many people already clearly feel it to be? It can be argued that if those that we elect are going to share a decision-making or policy-making role with others that are not elected by the public at large, participative structures are a threat rather than a complement to traditional representative structures. (Callanan, 2005, p. 914)

*Increased responsiveness*, where policies are outcome of joint processes between major stakeholders, could be shaped by introducing interactive ways of policy making (Bekkers, 2004). Interactive opportunities may not influence the amount of citizens' input but could *introduce new voices in policy-making discussions* (Stanley & Weare, 2004). However, Bekkers (2004, p. 194) points out that the current result is not too convincing:

In several interactive policy-making projects, on-line debates have been used as an instrument to organize the debate between citizens, politicians and public servants. However, the results have been rather ambiguous. Some were rather successful, but in most cases they were disappointing.

Jensen (2003) found a Danish online discussion forum to be a success, because the *quality of argumentation* was high, and debates were conducted with a respectful tone and style. However, the project failed to bring a significant proportion of new voices into the debate. Online participators are often already active in traditional communication channels (Bekkers, 2004), and online forums could serve to amplify the influence of those who are already established in the political discussion forum (Best & Krueger, 2005), because there is a danger of listening mostly to those with the loudest voice (Callanan, 2005). Nevertheless, Stanley and Weare (2004, p. 505) argue that even a marginal number of new voices may make a difference:

... close examination of participants in a specific decision-making forum suggests that some are political neophytes, newly mobilized by the opportunity to voice their views. From a macro perspective, however, these numbers are so small they are unlikely to be measurable in standard cross-sectional surveys. Nevertheless, from the perspective of agency managers, these marginal changes in participation can be politically significant.

The role of major stakeholders is also discussed. Janssen and Kies (2005) argue that citizens' will to participate is dependent on assumed *political impact*. Such impact is not present if government officials' and politicians' participation is limited or nonexistent. The presence of politicians is found to contribute to a respectful tone and to factuality, even though they may use debate forums for their own purposes—for example election campaigning (Jensen, 2003). Rose and Sæbø (2005) investigated politicians' and citizens' roles more in detail and found that citizens engaged in discussions to set agendas and influence political decision making, whereas politicians demonstrated their specialist abilities through argumentation and election campaigns, and they argue that both sets of interests need to be accommodated in online communities.

The *quality of the argument* may also influence outcomes. Ranerup (2000) found online discussions to be in accordance with deliberative democracy, attentive to dialogue between major

stakeholder groups, because a large majority of contributions was focused on political issues and also part of a dialogue. Ainsworth et al. (2005) found the opposite; discussions often ended in irrelevant and inconsequential topic areas. Hagemann (2002) argues that such discussions, dominated by contributions expressed without argumentation (or arguments based on “common sense,” rather than earlier contributions), do not live up to the expectations of furthering democracy. Discussions are not considered *deliberative* if they are characterized by monologues, are influenced by flaming, and lead only to polarization of opinions (Janssen & Kies, 2005). Bekkers (2004, p. 195) concludes (rather pessimistically):

... quality of the debate, the participation and the responsiveness of these virtual policy making processes has been rather poor. On-line debates have mostly been seen as an opportunity to have an informal chat with an alderman in local government or with a (deputy-) minister at the central level. It has been seen as a way to express specific ideas, free from obligations. The emphasis has been lying on the interactive gathering of information and opinion polling by using other, non-traditional communication channels (the Internet), which do not threaten the ‘modus operandi’ of representative democracy.

Finally, the design and management of discussion forums may influence their outcomes. Many discussion forums are moderated, giving the moderator considerable influence over what is discussed and space for dissenting voices (Ainsworth et al., 2005). Identity management and freedom of expression are found to be important factors promoting the quality and continuity of the political debate (Janssen & Kies, 2005). Janssen and Kies (2005) also argue that the host for the online discussion forum may also influence its outcomes: ideologically extreme communities are less likely to host open and plural forms of debates. In addition, asynchronous forums are found to be more adapted to deliberative debate than synchronous, because asynchronous discussion allow for an extended rational-critical form of debate.

Reported effects are, in a majority of cases, based on single case studies, where the evaluation techniques are not always explained in detail. More and better evaluation is needed, and underlying premises need to be developed:

... The current study thus illustrates the importance of the context for understanding patterns of power and resistance: We cannot simply assume that participation is democratic, while non-participation is not - we need to go beyond simple unitary characterizations of e-democracy. Ainsworth et al. (2005, p. 140)

## Evaluation

Political discussion forums are evaluated to determine their effects. Profound evaluation of ongoing initiatives could improve future initiatives, because identified mistakes could be avoided and successes repeated. There is no generally agreed definition on a set of evaluation criteria for discussion forums, and the criteria may vary widely. Various criteria like *contextual factors*, *quantity measurements*, *content analysis*, *demographics of participants*, and *style and tone of the discussion forums* are adopted.

*Contextual factors* are evaluated to determine their influence on the discussion forums and their effects. Janssen and Kies (2005) evaluated the level of deliberation and argue that different participative culture influences the level of deliberation. Democracy models could also be introduced to evaluate how various contexts influence the effects of political discussion forums (Ainsworth et al., 2005; Päiväranta & Sæbø, 2006). Päiväranta and Sæbø (2006) illustrate how the use of an evidently identical technological artefact (the discussion forum) varies according to their contextual

settings and evaluation is conducted focusing on how various stages in political decision-making processes influence the use and usefulness of political discussion forums (Ranerup, 1999).

*Quantity measurements* are the most frequent way to evaluate simple counting of participation, often by counting numbers of contributions (Aikens, 1998; Ainsworth et al., 2005; Hagemann, 2002; Scheufele & Nisbet, 2002). Some discussions forums are found to be successes, based on the amount of postings (Jensen, 2003), while other count postings to categorize themes, topics (Best & Krueger, 2005; Hagemann, 2002), or use patterns (Norris, 2001).

Evaluation could be based on *content analysis*, where repeating themes are observed and categorized using some kind of coding systems; content analysis provides comprehensive overviews of the added postings (Rose & Sæbø, 2005). Online postings are investigated to identify which subjects that are discussed (Ainsworth et al., 2005) analyze the degree of interaction in the communication taking place, for example, by investigating the degree of one-way or two-ways communication. This is done by identifying to what extent references are made to current postings when new postings are added (Ainsworth et al., 2005; Hagemann, 2002). Hagemann (2002) investigated to what extent participation is concentrated and monopolized by active participants by combining frequency counts (on number of postings) and analysis of to what degree active participants respond to other active participants. Investigations on the degree of dialogue are used to investigate difference in deliberation cultures (Janssen & Kies, 2005) and comparison is made between online and off-line participation to investigate potential differences (Best & Krueger, 2005; Stanley & Weare, 2004). Based on in-depth analysis of online postings, Rose and Sæbø (2005) identified differences between politicians and citizens, where politicians participated to market their own ideas and present their viewpoints, whereas citizens participated to influence politics directly.

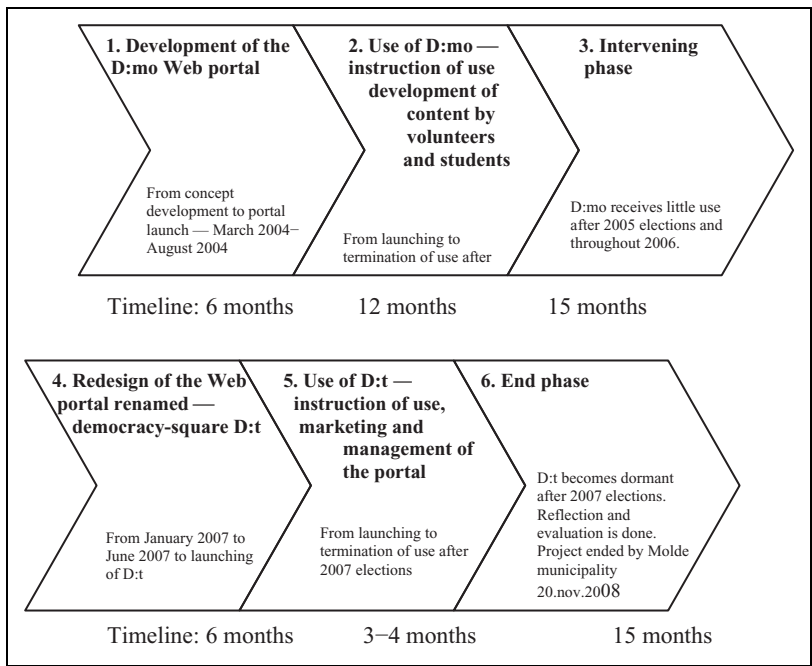
Best and Krueger (2005) investigated the representation of Internet political participators to evaluate the *demographics of participators* and found that online discourse participators resemble those off-line participators. Age was an exception; however, elderly people tend to participate more in traditional off-line deliberation than younger people. For online deliberation, age does not independently influence participation. Stanley and Weare (2004) compared online and off-line submission to examine to which extent Internet elicited participation by previously inactive individuals.

The *tone and style* of online postings are evaluated (Jensen, 2003; Papacharissi, 2004), concluding that contributions added in online discussions forums were characterized by openness, respect for other opinions, a respectful tone, and well-organized argumentation (Jensen, 2003). These characteristics are normally seen as prerequisites for a well-functioning public sphere, leading Jensen (2003) to conclude that online discussion forums may be seen as virtual arenas for the extension of the public sphere.

Despite initial evaluations of discussion forums for eParticipation, Best and Krueger (2005, p. 204) argue that more research efforts are needed to understand how such initiatives influence:

Because it remains unresolved to what degree online political activity influences policy makers and other citizens, and the answer to this question crucially determines the instrumental implications of this new participatory medium, considerable work remains to fully understand the implications of online political opportunities.

The literature review identifies several research articles focusing on various characteristics of political discussion forum, but few, if any, attempt to develop a coherent account of elements influencing design and management of such systems. The discussion of current research based on the model of Sæbø et al. (2008) offer more coherent insight into connections, characteristics, and challenges of various elements. To express the explanatory potential and further develop the descriptive model, we conduct an analysis of a longitudinal case study (“D:mo”), focusing on the introduction of a discussion forum in a local Norwegian municipality. Beyond analyzing the case based on findings from



**Figure 2.** Data Collection Phases

the literature review, the analyses also offer insights into additional characteristics to further develop the descriptive model of political discussion forums in their social context, which are elaborated in the next section of the case example.

**Case Example: D:mo**

The research area of eParticipation is still in its infancy and therefore exploratory studies are needed to capture reality in greater detail (Galliers, 1992). A case study focuses on understanding the dynamics present within single settings (Eisenhardt, 1989), where the phenomenon can be studied in a natural context, focusing on specific events rather than on clearly defined variables (Langley, 1999).

A pilot project in eDemocracy was introduced in the Molde municipality in Norway in the spring of 2004, in the form of a political discussion forum for participatory debate. The forum is a service concept developed by the consultant and software development firm of Ergo Group AS. The Norwegian State Communities Department had given economic support to the pilot project and the actors responsible for the implementation of the project were the leaders of Molde municipality including staff from the Mayor’s office. Molde municipality became the first adopter and tester of the portal and it was linked to the municipality’s home page in the spring of 2004. The portal was used to some degree by target segments in 2005 and then was relatively dormant until a new version was relaunched in June 2007. The portal had again fallen into disuse at the end of 2007.

This research follows a multiple data collection, single analysis strategy. The case data were collected in several iterations from spring 2005 until March 2008 (Figure 2). This period covered includes data collection from the initial genesis of the service concept identified initially as D:mo and after relaunched in 2007 as D:t. Data collection methods included direct observation in meeting between the stakeholders, document studies, conducting of two surveys to different stakeholder groups, system observation, and transcription of e-mail conversations and records of users

contributions. Data were recorded as project agendas for meetings, minutes and notes from meetings, reports on project design and specification documents, e-mail collections, and collections of survey results and summary reports. See Appendix for full details on data gathering activities.

The data set, based on the multiple data collection strategy, is mainly textual and in principle form textual documents suited to qualitative analysis. Content analysis (Berelson, 1952; Silverman, 2001) based on categories derived from the model of Sæbø et al. (2008) and the literature review is the primarily data analysis strategy in the case study. Content analysis provides “a relatively systematically and comprehensive summary or overview of the dataset as a whole” (Wilkinson, 1997, p. 182). A qualitative content analysis approach is conducted (Wilkinson, 1997), where the thematic categories are studied in their location in the source text, where the addition of context can help identify additional relevant factors such as irony and subtextual meanings. The data collection, from the multiple data sources, were analyzed toward the model and findings from the literature review.

### Activities

From the literature, we found that activities to be the issues of *policy making*, *feedback*, *moderation*, *design*, and *identity control*. The central interactive content of D:mo took part in the debate forum. The forum was divided into themes, with an overview so that the themes would be recognizable. Registration was required and functioned as a type of *identity control*. Anonymous contributions were not allowed to signal the serious purpose of the forum. However, examination of the content and structure of the debate showed that there was no targeting or particular focus to the debates initiated, that topic coverage was relatively shallow, but that discussion content was fairly unbiased. No archiving of old postings was apparent. Finally, even in the fall of 2007, interest in most of the debates was low. Very few of them had more than one contribution. *Moderation* of forums can be considered weak. Although any registered user could add to a forum, it appeared that the project coordinator initiated most discussions. This demonstrated that the project coordinator was informally moderating the forums, although his participation was not seen as a role of gatekeeper. Weak moderation could be positively interpreted in this case as a sign that someone cares. However, it could be negatively interpreted as a sign that not enough citizens cared to make a contribution.

The D:mo project was not explicitly initiated to act as a *feedback channel* where citizens could give feedback to politicians and therefore it had no apparent decision-making or *policy-making* impact. The purpose of D:mo was to give people more information about the different political parties and to create online debates. It seemed a problem that this purpose was not communicated on the site. A second purpose of D:mo was to give citizens a forum to discuss with other citizens. Based on the low interest and lack of discussions, D:mo arguably did fail to attract citizen-to-citizen discussions.

The site did not make visible claim to be targeted for any specific segment of citizens. The developers of D:mo did not engage key stakeholder groups in the *site design* or in the design process. This was evident in the redesign of the site in that there were a limited number of forum categories of which new categories could only be created by registered political representatives and not by interested citizens that may have wished to engage in citizen-to-citizen debate. This structure of data through the site design influenced the limited use of the site by citizens.

### Actors

From the literature review, we found that *politicians* and *citizens* are found to be main stakeholder groups. User groups were not explicitly identified and addressed in D:mo throughout the initiation and development of the project. No visitor statistics were collected through web site analytics, and there were no on-site provision in either the initial or relaunched versions for users' feedback or ideas on how to better serve real user needs. Citizens were asked in a survey in August 2005 about the ease

or difficulty of making a contribution at D:mo; however, very few were even aware of the portal's existence (Kjersem, Jákupsstovu, & Molka-Danielsen, 2005). A survey of political representatives in November 2007 focused the issue of why representatives choose particular communication channels rather than on the improvement of D:mo (Jákupsstovu, Kjersem, & Molka-Danielsen, 2008). Analyses of actors are based henceforth on observation of them through the development and use of D:mo.

*Citizens* were to be the targeted beneficiaries of D:mo. Although D:mo was intended to be used as a forum for free and open debate by all citizens, a main focus on management and use was directed toward teenagers (young citizens that would be able to vote in a few years) and senior citizens (retired from the workforce). Students from schools had in the first version been engaged in producing and editing content for the site, but this practice had been dropped in the relaunched version in 2007. With less focus on contributions from teenagers and senior citizens, the project group hoped to engage all citizens through increased participations of the politicians. This, however, did not improve citizen participation.

*Politicians* were expected from the project start by the project group (including system developers, mayor's office, and project coordinator) to be active on the portal as the receivers of citizens' opinions. Politicians were discussed as a homogeneous group, without considering differences of age, roles, or political party. It was assumed that politicians would participate as part of their civic duties, and there was no detailed consideration of their needs or motivations.

Beyond actors discussed in the literature, *the systems developer*, Ergo Group, had a major influence on the development and management of D:mo. Ergo Group developed the service concept for the D:mo web portal, which posited a (largely undocumented) need for web support for political participation at a time of low electoral participation and civic engagement. The lofty goals of the site were "to stop the negative trend and arrange for an enduring positive development in the citizens' relationship to local democracy, and stimulate critical factors such as trust, overview, engagement and influence" ([www.ergo.no](http://www.ergo.no)).

The project's *sponsors* also played an important role. The Norwegian state ministry of local government and regional development gave economic support to Molde municipality in 2004 for the modernizing of public management; however, the ministry was not consulted in the systems development process. The mayor's office was responsible for the deployment of ministry funds. They contacted an existing supplier (Ergo Group) and subcontracted the project coordination and operation of the D:mo project to a private consultant.

### Contextual Factors

From the literature, we learned that contextual factors include *political culture*, *administrative level (local, regional or national)*, *accessibility*, *user competence*, and *ownership*. The developer, ErgoGroup, did not consider the existing *political culture* in the design of D:mo. Although D:mo might have been designed for support of a direct democracy through support of discussion forums, the political culture that is active in Molde is one where the political representative sets the agenda and controls the decision process. D:mo was adopted as a predefined service concept and not developed from bottom-up design. The historical record of the portal shows that the mayor's office was initially impressed with the prototype technology as proposed by the developers and decided to try it as a means of articulating specific democracy objectives. As D:mo and later versions of the service concept were implemented, it became apparent that the portal was designed for citizens to contribute to debate, and perhaps to political agenda-setting, but with no explicit connection to any decision-making process. It is not surprising then that this design process resulted in limited *engagement in administration* and *ownership* of the technology by citizens and politicians alike.

*Access to technology* is, for most people in Norway, not a major issue, were almost 9 of 10 people (above 16 years old) have access to the Internet. However, D:mo made no special provisions for citizens with disability issues.

*User competence* training and portal development activity took place in spring 2004 for politicians and several student groups. The municipality, with help of Ergo Group, held a seminar for politicians demonstrating how to make contributions on D:mo. Later, the private consultant organized meetings with volunteer organizations and a local high school to engage teenagers with the management of the site and also to encourage them to make contributions.

## Effects

From the literature, we found that discussion forums could be initiated to increase deliberation, increase governance responsiveness, introduce new voices in policy-making discussions, increase participation, improve quality on political argumentations, improve political impact, or enhance surveillance and control. Although increase in deliberation was intended, this did not for the most part materialize. First, politicians did not use the portal much, even during the election campaign, preferring other forms of communication with constituents and as was pointed out earlier the will of the citizens to participate may be dependent on the assumed political impact (Janssen & Kies, 2005). This point combined with the established low participant engagement, and ownership in the design process would effectively explain a nonincrease in deliberation.

To encourage use of the portal, the political representatives were offered ads on their political positions in the local newspaper. In exchange for the ad, the politician had to participate in follow-up debates that would take place on the portal afterward. These debates for the most part never materialized on the portal. Second, many representatives did attend the educational seminars and were registered with the portal at those seminars. However, these representatives were never made aware of how the D:mo portal was connected with their role as representative. Citizens were also never made aware of how debate that might take place on the portal could affect the administration process of the municipality.

Another observation of *information quality* was that information was stale and appeared to be accurate but incomplete. For example, one candidate for mayor wrote an article where he stated the number of representatives the different parties had in the community. However, references were not made to municipality home page or to the origin of information. The site was missing clear contact information to explain authority, that is who was administering the site and who could help with problems, such as registration or making contributions. Information on political parties was not in-depth but an overview, and such information could not be trusted to be recent, as much of the information on site appeared out-of-date. Relevant links to outside sites included only Molde municipality, and the developers ErgoGroup, making the site seem isolated from other debate forums.

## Evaluation

From the literature, we found that discussion forums are evaluated based on various criteria, such as *contextual factors*, *quantity measurements*, *content analysis*, *demographics of participators*, and *style and tone of the discussion forums*. The project group had requested of developers in several communication exchanges that *quantity counts* on the number of “site visits” should be kept for D:mo. This was not done; however, the number of contributions to discussion forums could be readily seen. In terms of *content analysis*, the site did not claim to provide comprehensive coverage of any particular topic. In fact, the top page was lacking information about the purpose of the site. The site was further divided into pages on political parties and debate forums. The information on political parties was provided as an overview, and participation in debate forums was low. Following internal links accessed most of the information on the site. The site supported few relevant outgoing links—these included links to Ergo Group and to the municipalities’ home page.

Evaluation of the number of participating politicians and how many knew about D:mo was part of the results of a survey given to political representatives in November 2007. The survey was sent to

local political representatives of Molde municipality, who were of a group of active representatives for the period of 2003–2007 and 2007–2011 and including first and second substitute representatives. In total, 85 surveys were issued and 61 responses were received. The details of respondents' feedback can be found in Jákupsstovu et al. (2008); however, politicians for the most part used other channels of communication with constancies. There appeared no difference in preferred communication media based on political party or experience of the number of terms served. Specific comparisons based on demographic characteristics, tone, and style were not evaluated.

### *Summary of Case Analyses*

The case analyses illustrate the explanatory potential of our findings from the literature review. We identified additional characteristics to guide the development of our model (our theoretical contribution), which were not identified by the literature review, like the importance of stakeholder groups such as system developers and sponsors, and the expected effect D:mo were intended to have on information quality. Furthermore, the case analyses added more insight into key design challenges for political discussion forums, the more practical-oriented contribution from this article. These will be discussed more in the following discussion sections, introducing the suggested model and suggested key design challenges.

## **A Model of Political Discussion Forums**

The descriptive model is mainly developed based on the literature review. The case study analysis primarily illustrates the explanatory potential of the model. Secondly, the case study analysis identifies some supplementary elements not identified by the literature. Thus, the models are summarized below, indicating finding from the literature and the case study (case study findings supplementary to literature review findings is indicated in italics).

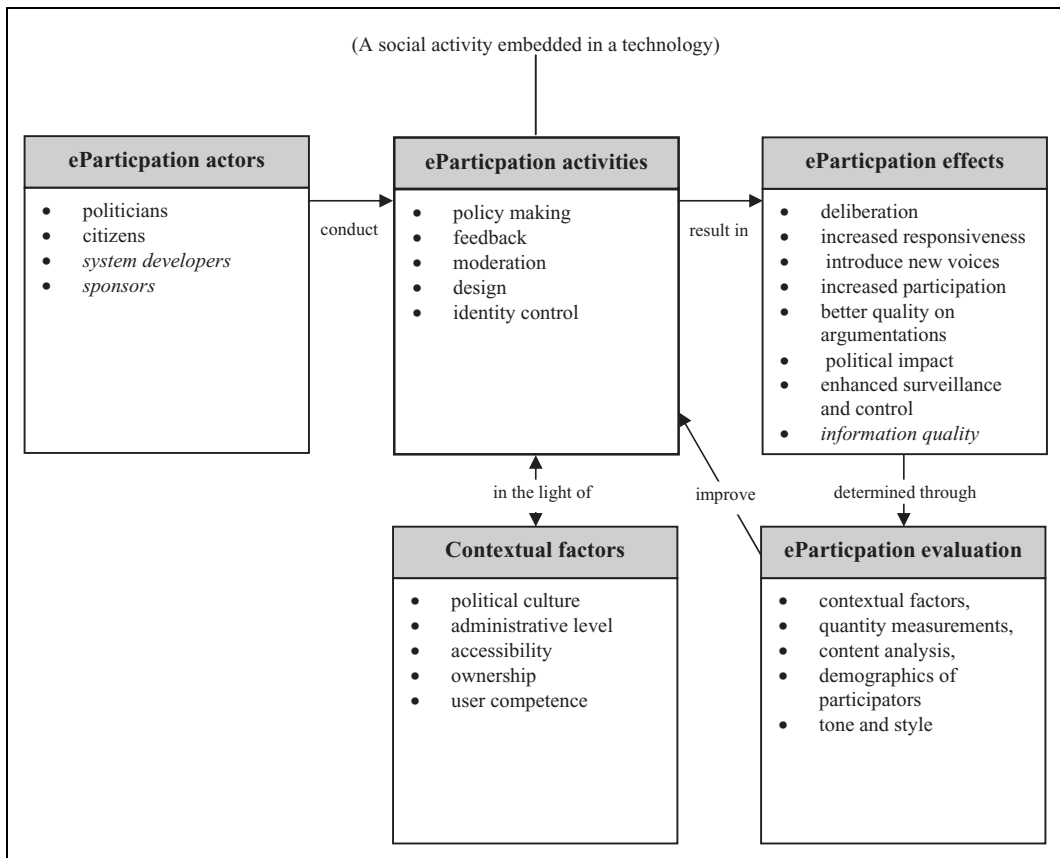
The descriptive model depicted in Figure 3 is an interpretive tool that assists first in the identification of the influential active elements in a social-technological system, those elements that need to be understood and addressed. Second, it makes more transparent the cyclical nature of relationships between these impacting elements. Finally, analysis through this model allows reflection of the longitudinal processes in stages thus allowing the investigator to identify what went right as well as what went wrong, in so allowing for systems redesign in action. In analogy, this model has much in common with the more general Activity Theory analytical approach as expressed by Engström (1987). In common, the design of discussion forums is initiated by motives, needs, or drives. In these systems, interactions take place between parts of a social system and goals are also achieved through innovative approaches and use of technologies or materials. This descriptive model however differs from a generic Activity Theory analytical approach in that it is tailored to these systems and the identification of contextual factors and participatory effects are an accumulations of lessons learned through former cases such as D:mo.

## **Key Design Challenges for Political Discussion Forums**

The analysis of the scientific literature and the “D:mo” case explores a number of key design criteria and challenges. This concluding section discusses these sociotechnical challenges, covering both technical design issues and issues of implementation, management, and governance. These are elaborated in Table 1.

### *Holistic Analysis of the Combined Factors*

The elements of actors, activities, contextual factors, effects, and evaluation are parts of an integrated system with associated impacts. We conclude that a key challenge of managing actors is that building



**Figure 3.** Descriptive Model of Political Discussion Forums

an online discussion forum does not in itself encourage commitment to political participation or build a community. The design questions and challenges are concerned with identifying and engaging various actors for the eParticipation tool or service and specifying its overall purpose and goals.

Actors will conduct activities. The primary activity being that of political discussion forums being realized through a piece of software embedded in a set of organizational procedures—where the whole represents a service to the user community. From this arise a number of challenges related to the design and management of discussion forums. A major challenge, we conclude, resides in the issue of site design and deliberative data structure design. We advise against overcentralized site design that can lead to systems reflecting misleading stereotypes of what developers assume users are interested in—this is particularly problematic when a core aim is to engage a critical mass of citizen users. Procedures for tool development in dialogue with, or under the control of, users and stakeholders should be investigated. By including the main target groups (e.g., young people [Finn & Detlor, 2002; Macintosh et al., 2003]), political discussion forums could be designed according to their wishes and needs. We dually take reservation against strictly deliberative data structure design. Rose and Sæbø (2005) found that the deliberative structure design of a discussion forum, where discussions were preorganized into 25 categories by the development team, made it difficult for citizens as well as politicians to keep track of ongoing discussions and thus to participate actively. In addition, the data structure influenced the participation, where debates were organized by one question initiating the debate and all other contributions responding. Some participators found the data structure to be too strict, not supporting free and unrestricted discussions (Rose & Sæbø, 2005).

**Table 1.** Key Design Challenges for Political Discussion Forums

Key Design Challenges	Lessons Learned Through D:mo Case
<b>Actors</b>	
<ul style="list-style-type: none"> <li>• Major user groups need to be identified and addressed when developing political discussion forums.</li> <li>• Which politicians and administrators should be involved in the participation process, and what are their roles?</li> <li>• Are they primarily the receivers of proposals or comments deriving value from the participation process, or are they directly engaged?</li> </ul>	<ul style="list-style-type: none"> <li>• Political discussions forums are sometimes aimed at “citizens”—that is everyone. This is a valid strategy but it is too general; it makes it difficult to develop a sense of community or common purpose among users</li> <li>• Better strategy is to target particular citizen groups; for example by issue (health, environment), region, age (young people), professional background (farmers, engineers), social status, education, or other characteristics</li> <li>• Government and administration stakeholders should be involved</li> <li>• These stakeholders’ presence may influence the success of discussion forums</li> <li>• Stakeholders and user groups may have different motivations for participation—for example, politicians often need opportunities to profile themselves or their parties, whereas citizens may primarily seek influence in the policy-making process. These different motivations need to be understood and incentives and rewards for participation (in relation to the different motivations) need to be incorporated in the service</li> <li>• Stakeholders may build up more influence or exposure as a reward for sustained participation</li> <li>• Feedback about the results of participation exercises is also a good motivator</li> </ul>
<b>Activities</b>	
<ul style="list-style-type: none"> <li>• What considerations should be made in the design and ongoing maintenance of the forum?</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate design approach should be adopted, including major stakeholder groups already in the design activities. Overcentralized traditional development methods can be problematic because of the need to generate citizen engagement. A certain amount of iterative development based on feedback from practice is also normally required</li> <li>• Deliberation and data structure design should be considered according to the stakeholder interests</li> <li>• Deliberative structure design involves structuring of debates for dialogue, argumentation, negotiation, or decision making, for example in phases, as hierarchical thematic threads, question and answer, and argument support</li> <li>• Data structure design involves the organization of participation contributions, for example as free text or more or less structured inputs, the presence of data retrieval; for example by keywords, smiley or likert evaluation, text fields or categorization</li> </ul>

*(continued)*

**Table I (continued)**

Key Design Challenges	Lessons Learned Through D:mo Case
Contextual factors	
<ul style="list-style-type: none"> <li>eParticipation exercises can be invalidated if they are unrepresentative, and risk favoring the already privileged technology-literate elite</li> <li>User competence needs to be developed not only to become technological literate but even more training and education is needed for major stakeholder groups in participation processes and use of web applications</li> </ul>	<ul style="list-style-type: none"> <li>Tools need to be designed with a wide spectrum of potential users in mind, with different social, cultural, economic, and technical backgrounds</li> <li>As seen in our survey to political representative, these found other media as more important for communication with constituents. It was not enough to teach representatives how to make contributions but for the municipality to make a clear statement as to the role of this forum</li> </ul>
Effects	
<ul style="list-style-type: none"> <li>eParticipation projects cannot focus on the provision of a software solution, without considering the governance implications of what they do or the wider political landscape. The challenge is to not make assumptions about how eParticipation will contribute to political realities</li> </ul>	<ul style="list-style-type: none"> <li>eParticipation is meaningless if it is conducted in isolation from the political process or without affecting the debate or policy making</li> <li>Participation is often considered a good thing in itself, and it is assumed that stakeholders will participate if given the opportunity. However, these things are not necessarily true and there are many different design possibilities for eParticipation tools</li> <li>Focused participation goals make many other design decisions easier. For example, is the tool primarily for agenda-setting, consultation, deliberation, negotiation, decision-making, or some other purpose? Which policy area or areas are involved? What are the expected outcomes in terms of deliberation quality, involvement in decision making, extension of participation to particular groups, greater volume of participation, or social capital effects?</li> </ul>
Evaluation	
<ul style="list-style-type: none"> <li>To evaluate and potentially improve the outcome of such eParticipation initiatives, indicators and baselines for the desired outcomes and evaluation criteria need to be established, and data collected and analyzed accordingly. Learning could then result in improved practice, including tool or service redesign</li> </ul>	<ul style="list-style-type: none"> <li>In short, designers of eParticipation service concepts should collect statistics on user visits and should include a web surveys to users and should evaluate a site through various frameworks, including for example, a content checklist. This would give a more accurate view of how various stakeholder groups experience the site rather than interpreting the views of IT designers who only see the site with "IT-eyes."</li> <li>By comparing the surveys from various citizen groups, the D:mo developers could have seen what the majority of the users did not like, and successive implementations might have been more successful. In summary, it appeared in D:mo that although the web site was to some extent redesigned, the design process was not</li> </ul>

Note: IT = information technology.

Activities are made in light of contextual factors. We found that several design challenges relate to contextual factors such as political culture accessibility, marketing, and technology literacy. We summarize the lesson learned that designing political discussion forums aiming at open access for all may include continuous information provision to enhance participation and active recruitment of users and stakeholders, and active recruitment of users through other media, for example, by advertising, media coverage, and search engine profiling.

Activities will result in effects. We observed that online discussion forums can be used to promote particular interests or ideologies, to express competing interests, to manipulate public opinion, to vent anger, and for a variety of other purposes that do not conform to a mechanical governance model or to an ideal deliberative practice. Politicians can use the output from eParticipation exercises to reinforce their positions, to divert attention from potentially damaging issues, for campaigning purposes, to deflect blame, to undermine their opponents, and so on.

Effects are determined through evaluation and hopefully give improving feedback to the design process, improving the forum activities. In summary of a lesson learned, the long-term future of any tool is dependent on being able to learn and adapt to community needs. The best way to do this is through evaluation of the tool and its results. Results need to be analyzed and understood according to the participation (and decision-making) processes and fed back into the regular political processes. Moreover, feedback and response should be maintained, ensuring that the outcomes and political results of the participation exercise are reported back to the participants.

## Conclusion

In this article, we discussed the use of political discussion forums for eParticipation purposes. Based on the eParticipation model presented by Sæbø et al. (2008), we reviewed relevant research literature and developed a model on discussion forums for eParticipation purposes. The D:mo initiative in Molde municipality in Norway is analyzed based on the model to further develop the model. The review and case study analysis form the basis for suggesting key design challenges for online discussions forums.

The major contribution to the eParticipation research area is the development of the model as to how to use discussion forums for such purposes. Elaborating on the general model of the eParticipation area of Sæbø et al. (2008), the suggested model concretizes major issues when discussion forums are involved. The rather unsuccessful D:mo project indicates that there are no easy ways forward to gain achievements by introducing discussion forums. The key design challenges suggested here could thus guide current and future eParticipation project and represent the major contribution to practice in our work.

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#### Appendix. Data Gathering Activities in "D:mo"

Phases	Activities	Participants	Documentation
I. Development of the D:mo web portal	Document collection Political statement—eDemocracy can establish new channels, for example electronic meeting places between citizens and politicians	Political leader: Morten Meyer	Nordic information technology (IT)-ministers' meeting, Reykjavik August 26, 2004: <a href="http://odin.dep.no/mod/norsk/aktuelt/taler/minister/002001-991460/dok-bn.html">http://odin.dep.no/mod/norsk/aktuelt/taler/minister/002001-991460/dok-bn.html</a>
From concept development to portal launch—March 2004 August 2004	Documentation collection ErgoEphorma/Ergo group describes the goal of D:mo to stop the negative trend and give way for a positive development of citizens contact with local democracy Observing presentation arrangement	Concept developer: Ergo Group  Molde municipality Mayor's office and Ergo Group representatives	Press cuttings from <a href="http://www.ergogroup.no">www.ergogroup.no</a>  Notes from seminar at Håholmen by project coordinator "Innovasjon Consulting"
2. Use of D:mo—instruction of use development of content by volunteers and students	Observing system in use	Molde University College	Notes and screen shots
From launching to termination of use after 2005 elections	Promotions of D:mo made in the local newspaper  E-mail conversation  Survey given on main street on Moving-in Day, August 27, 2005	Project coordinator  Project group lead by project coordinator  Molde University College	Observations of ads in the local paper listing the web address of the portal E-mails reporting on the portal development and maintenance by involvement of students from the local high school. Students conducting interview questions "5 on the Street" for example Notes and survey results
3. Intervening phase	Recommended changes report given, November 4, 2005, to Project group	By Molde University College team to project coordinator, Mayor's Office, and Ergo Group	E-mails to present findings and survey results

(continued)

**Appendix (continued)**

Phases	Activities	Participants	Documentation
D:mo receives little use after 2005 elections and throughout 2006	Follow-up meetings and presenting an evaluation report at project group meeting	Mayors Office, project coordinator, Ergo Group, Molde University College	Notes by Molde University College team and summary reports of project coordinator from meetings, January 26, 2006
	Municipality steering meeting to discuss future of D:mo	Mayors office and project coordinator	Municipality steering group meeting report from meetings, February 7, 2006, and February 14, 2006
	Presentation at workshop on eGovernment, February 8, 2006	Molde University College	Screenshots of D:mo and observations of use
4. Redesign of the web portal renamed—democracy-square D:t	E-mail conversations	Project coordinator and Ergo Group, Molde Mayor's Office	E-mails, status report by project coordinator in January 2007 on the redesign process
From January 2007—June 2007 to launching of D:t	Establishment of a steering group to contribute content to D:t	Political party representatives	Document with contact information in May 2007
	Project plan presented, May 21, 2007, for defining responsible roles with new portal functions, describing the new marketing plan	From the project coordinator to the project group	Document with the marketing plan in May 2007
5. Use of D:t—instruction of use, marketing, and management of the portal	E-mail discussions on project coordination	Project coordinator with the project group	E-mails
From launching to termination of use after 2007 elections	Courses to train political representatives how to make contributions to D:t	Ergo group, project coordinator, political representatives, and Molde University College	Notes and observations by Molde University College on the 2 days of training meetings
	Marketing in local newspaper, linking to other portals, ads in local movie theatre, and training for political representatives	Project coordinator and ICT specialist in mayors office	Report on marketing activities and training courses, June 18, 2007
6. End phase	Survey given to 85 local political representatives of Molde municipality in November 2007	Molde University College	Evaluation of the responses reported in Møre Research Report Nr. 0804

*(continued)*

**Appendix (continued)**

Phases	Activities	Participants	Documentation
D:t becomes dormant after 2007 elections. Reflection and evaluation is done. Project ended by Molde municipality, November 20, 2008	Technical evaluation of the usability and standard compliance of D:t portal made in April 2008	Molde University College	Notes, screenshots, and observations. Evaluation of the portal against W3C standards, also using framework of the Joint Information Systems Committee of UK reported in Møre Research Report Nr. 0804
	Molde municipality steering meeting, November 20, 2008. Council ends the project and decides to integrate some of the functions into the municipalities' other service portals	Molde municipality steering council with political representatives	Meeting protocol list (November 11) and meeting report on outcome (November 20) and letter from the Town Councilman that makes the concluding recommendation (November 16, 2008) that was accepted on November 20, 2008

Note: The longitudinal case study was followed for 4.5 years from initiation to final analysis. ICT = information and communication technology; IT = information technology.

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