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A Process for Identifying Objectives and Technological Forms in E-Democracy Initiatives

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ABSTRACT
An increased number of public organizations engage in E-Democracy projects to improve their capability to communicate on democratically issues. Such efforts are often complex due to lack of experiences from earlier projects and the complex nature on the communication taking place.

This article addresses two major problems identified from the E-Democracy literature and a conducted case study in a Norwegian local municipality. First the purposes for E-Democracy projects are often unclear and somewhat naïvely understood. To address this issue I draw upon the democracy model literature which identifies purposes for different democracies. Second it seems difficult to connect ICT to the identified objectives. As a response to this problem I suggest a theoretical lens bridging knowledge on democracy models, the genre of communication theory and IT artifacts. Based on these theories I propose a process for identifying objectives and technological forms in E-Democracy projects. I argue that the process can guide practice and research by identifying different objectives and opportunities in E-Democracy initiatives.

Keywords
E-Democracy, Democracy models, Genres of communications, IT artifacts

INTRODUCTION
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. The idea of democracy leans fundamentally on effective communication and informed decision-making about public issues among citizens, politicians, officers and other stakeholders who may relate to the decisions (Habermas, 1996; Van Dijk, 2000).

Whereas there is a reasonably extensive theoretical discussion on E-Democracy (see e.g. (Bellamy, 2000; Gimmler, 2001; Van Dijk, 2000)), the need for empirical studies and subsequent theory-building in the field have been addressed (Andersen & Henriksen, 2005; Grønlund, 2004). There is a need to build a theoretical and empirical base to better understand the link between technology and politics (Marcella, Baxter, & Moore, 2002; Scheufele & Nisbet, 2002) since the connection is poorly understood (Moon & Yang, 2003). In particular the connection between ICT and new media in E-Democracy projects needs to be addressed more in detail (Smith, 2000; Steyaert, 2000).

The absence of connection between technology and democracy is given as an explanation in the E-Democracy literature of the often modest impact reported E-Democracy initiatives have on public participation (Hoff, Löfgren, & Torpe, 2003). Technology is often simplistically coupled to direct democracy, ignoring the need to be more specific on democracy to understand how ICT influence (Bellamy & Taylor, 1998; Hoff, Tops, & Horrocks, 2000). Löfgren (2000) states that “We seldom find consideration on the way which the use of new technology might affect democracy” (p. 57). This is supported by Schmidtke (1998) who identified the missing discussion on the impact ICT holds on processes for democratic decision-making as a major reason for restricted success in E-Democracy projects. Tops, Horrocks, Hoff, and Bohr add a similar conclusion in their investigation on Danish political parties: “Political parties appear to have entered the world of new technology without any predefined or explicit strategy concerning the ways in which the use of new technology might affect democracy” (p. 155). There is a need for addressing the objectives, strategies and processes...
Identifying objectives and technological forms in E-Democracy initiatives

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Instead of focusing on technology concerns (Biasiotti & Nannucci, 2004; Grönlund, 2003; Hoff, Tops, & Horrocks, 2000; Marcella, Baxter, & Moore, 2002). Thus, I argue that there is a need to focus on the connection between the overall objectives on what to achieve by E-Democracy projects and the technology involved, to increase our understanding on consequences by developing ICT-based E-Democracy services.

Experiences from a case study (Rose & Sæbø, 2005) identified two challenges related to the subjects presented above. First, the purpose of the E-Democracy project was poorly understood and not shared between major stakeholders in the projects. The project group apparently took for granted that underlying conceptions of democracy were shared and well-understood, but the analysis showed that this was not the case (Rose & Sæbø, 2005). The main problem could broadly be described as a conflict of interest between major stakeholder groups. Thus, the first challenge that arose from the case was to identify major objectives for E-Democracy projects.

Second, the connection between the purpose of the project and the communication patterns was not clear. The analysis identified different communication patterns supported by different stakeholders. Only minor numbers of the contributions serve both citizens and politicians. I therefore question to what extent the design of the artifact (the discussion forum) was able to respond to the purpose for the project. Thus, the second challenge identified from the case was to enact the objectives identified with technological forms to develop in E-Democracy projects.

To address these challenges I develop a process for managing concept development in E-Democracy projects. The process is based on three major strands of research. To address the first challenge; identifying different purposes, I investigated the theory on Democracy models. This theory introduces coherent presentations of different democracy forms and their characteristics (see e.g. (Bellamy, 2000; Held, 1996; Lively, 1975)). By introducing four E-Democracy models (Päiväranta & Sæbø, Forthcoming) different expectations, motivations and interests can be identified and investigated. The second challenge; how to enact the objectives with technology, is addressed by bridging theories on Democracy Models, genre of communication, and IT artifacts. As I will illustrate, the bridging between these theories allows learning and reflection on how to enact objectives and technological forms in E-Democracy projects.

The suggested process has two major phases. First, objectives for the E-Democracy projects could be identified. Second, genres supporting these objectives can be discussed. The process responds to the criticized approach of concentrating on technology first and foremost without focusing on strategies and purposes (Grönlund, 2003; Olsson, Sandstrom, & Dahlgren, 2003; Ranerup, 2000; Tops, Horrocks, & Hoff, 2000).

In the following I will present the theoretical background for the suggested process. Then, the process is introduced, before I discuss implications and further research opportunities based on the suggested process and briefly conclude.

THEORETICAL BACKGROUND

E-Democracy models

To address the challenge of poorly understood purposes in E-Democracy projects the models of Democracy were investigated. The Democracy models represent a common way of characterizing different forms of democracy. Theories on democracy models (Held, 1996; Lively, 1975; Van Dijk, 2000) uses varying characteristics in order to clarify differences among democracy ideas, making a detailed comparison of the competing models difficult. A review of this literature conducted by Päiväranta and Sæbø (Forthcoming) suggest a simplified comparison of various E-Democracy models based on two fundamental characteristics: inclusion in decisions and control of the agenda (Dahl, 1989). Inclusion refers to the idea whether all adults belonging to a society are able to participate in current debates and decision-making processes. Control of the agenda is related to the issue of who decides what should be decided on, especially whether the citizens are able to raise issues and provide actively in decisions making as their needs emerge. Four models of E-Democracy was introduced (table 1). The models’ main characteristics are presented, allowing for comparison of different empirical situations or stakeholder perceptions. The E-Democracy Models form the theoretical base for the first step in my proposed process.

Communication Genres for E-Democracy

To address the problem of connecting objectives to ICT in E-Democracy projects I draw on knowledge of IT artifacts, genre of communication theories and the E-Democracy models (described above). First, various objectives for E-Democracy projects could to be identified by the four E-Democracy models. Second, the communication genre perspective is introduced. The genre perspective has already been used by others to investigate communication patterns and had also showed a promising potential to identify various communication patterns in the study conducted by Rose and Sæbø (2005). Third, knowledge on the technology itself can be found in the research strand of IT artifacts.
Partisan Democracy

Citizens express bottom-up opinions and critique on existing power structures. No explicit connection to the existing governmental or political decision-making processes is defined beforehand. Citizens set the agenda for public discussions, but not for decision-making.

ICT seeks to obtain visibility for alternative political expressions uninterrupted by the political elite.

Direct Democracy

Citizens participate directly in decision-making processes. The citizens are online affecting the decisions to be made (mostly at the local level), Citizens set the agenda for both public discussion and decision-making.

ICT is a crucial pre-condition for democracy to support coordination among decision makers.

Liberal Democracy

Government (politicians and officers) set(s) the agenda

Government serves citizens who participate in elections and related debates. Government would like to inform and be informed by the citizens. There is no clear connection to the decision-making activities.

ICT seeks to improve the amount and quality on information exchange between government and citizens.

Deliberative Democracy

E-Democracy projects are used for targeted purposes involving citizens in public decision-making processes. The citizens have a good reason to expect that their voices are heard concerning a particular matter.

ICT is developed for increased citizen 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

Table 1. Models of E-Democracy (based on (Päivärinta & Sæbø, Forthcoming)

The IT artifact

The IT artifact - the core subject matter of the field of Information Systems (Orlikowski & Iacono, 2001) - can be conceptualized in several ways. Orlikowski and Iacono (2001) define IT-artifacts as “Those bundles of material and cultural properties packaged in some socially recognizable form such as hardware and software” (p. 121). What features to include is dependent on different views on the IT-artifact (proxy, tool, ensemble, computational or nominal). Benbasat and Zmud (2003) define IT-artifacts as: “the application to enable or support some task(s) embedded within a structure(s) that itself is embedded within a context(s)” (p. 186). By looking at the IT artifact from an ensemble view, the technology is “only one element in a “package,” which also includes the components required to apply that technical artifact to some socio-economic activity” (Orlikowski & Iacono, 2001, p. 125). To address the IT artifact and it’s premises, there is a need to focus on “technologies with distinctive cultural and computational capabilities, existing in various social, historical, and institutional contexts” (Orlikowski & Iacono, 2001, p. 131) focusing on structure(s) and context(s).

Both Orlikowski and Iacono (2001) and Benbasat and Zmud (2003) add general comments on the need for increased focus on IT artifact, yet how to address the IT artifact in specific research areas is not clear. To address the IT artifact in the E-Democracy research area I draw upon the communication genre perspective.

The genre of communication perspective

The genre perspective is one way of studying the emergence of new media or sub-media (Ihlström, 2004). Genre reflects communicative purposes and are characterized in various ways (Ihlström, 2004). In general, genre of communication is characterized by socially recognized substance and common characteristics of form(s) of a recurrent communicative action type identified in a community (Yates & Orlikowski, 1992). Substance refers to social motives, such as the purpose of the communication (Honkaranta, 2003). Form of a genre refers to the physical and linguistic features like layout, language and media used (Honkaranta, 2003; Yates & Orlikowski, 1992).
The *form* (from the genre perspective) addresses the technology itself (the inner circle in figure 1 below). The *substance* element of the genre reflect Orlikowski and Iacono’s (2001) ensemble view of IT-artifacts, where the technology is seen to be embedded in tasks and structures. Thus the genre perspective combines form and substance (the task and structure part of the IT artifact) to address the IT-artifacts by an ensemble view.

IT-artifacts are also embedded in contexts. The E-Democracy models characterize different democracy forms and identify overall objectives. I argue that for E-Democracy projects the contextual settings can be identified from the introduced E-Democracy models. Thus genre analysis, combined with the E-Democracy Models, provides a conceptual tool to capture both characterizations of the IT artifact in itself and the context(s), structure(s) and task(s) of its use. Figure 1 illustrates how the genre perspective and the models of E-Democracy constitute the Ensemble view of IT-artifacts in the E-Democracy field.

![Figure 1. An ensemble view of IT-artifacts encompassing E-Democracy (based on (Benbasat & Zmud, 2003))](image)

Based on the suggested approach Sæbø and Päivärinta (Forthcoming) identified genres from projects and initiatives reported in the E-Democracy research literature (table 2).

Table 2 illustrates how a communication channels (like discussion forums) support different democracy models. A study made by Päivärinta and Sæbø (2005) identifies how discussion forums for different democracy models shows different characteristics and therefore can be meaningfully used in relation to several models of Democracy. The study concluded by claiming that “it is not sufficient to speak of a particular medium as such, but the genre-related issues are needed for clarifying particular uses of technology for E-Democracy in a particularly context” (Päivärinta & Sæbø, 2005, p. 194).

### A PROCESS FOR IDENTIFYING OBJECTIVES AND TECHNOLOGICAL FORMS IN E-DEMOCRACY INITIATIVES

Based on the theories presented above I suggest a process with two major phases.

**Phase 1: Identifying the purpose of the projects**

The first phase concentrates on identifying objectives for the forthcoming projects. Three main activities are suggested. First, major stakeholders for the project should be identified. Involving major stakeholder throughout the whole process can improve projects (Flak & Rose, 2005). The project initiators could be responsible for identifying major stakeholders. Second, analyses should be conducted by the stakeholders on main objectives for the forthcoming E-Democracy project. Reflections on different E-Democracy models allow for positioning different stakeholder views on main objectives. Third, divergent ideas should be discussed by major stakeholders to agree on what to focus on and to identify areas where consensus between major stakeholders for the projects is not achievable. Table 3 presents major steps for phase one of this process.
<table>
<thead>
<tr>
<th>Form</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liberal Democracy</strong></td>
<td></td>
</tr>
<tr>
<td>Discussion forums</td>
<td>Information exchange between stakeholders without a clear connection to decision-making</td>
</tr>
<tr>
<td>Dialogue system</td>
<td>Citizens express their views as input to decisions made by politicians</td>
</tr>
<tr>
<td>Information broadcasting</td>
<td>Bring information from politicians to citizens</td>
</tr>
<tr>
<td>Governmental homepages</td>
<td>Inform citizens about timely issues</td>
</tr>
<tr>
<td>E-Debates between candidates</td>
<td>Broadcast debates between politicians</td>
</tr>
<tr>
<td>Information portals</td>
<td>One stop access point for information achievements</td>
</tr>
<tr>
<td>Consultation</td>
<td>Government/politicians responds to citizen’s questions</td>
</tr>
<tr>
<td>Candidate or campaigning websites</td>
<td>Promote a candidate or a case</td>
</tr>
<tr>
<td>Web Blogs</td>
<td>Broadcast politician’s view</td>
</tr>
<tr>
<td><strong>Deliberative Democracy</strong></td>
<td></td>
</tr>
<tr>
<td>Discussion forum (issue-based), E-Docket</td>
<td>Initiating, drafting and defining political issues</td>
</tr>
<tr>
<td>Dialogue system</td>
<td>Citizens express suggestions and ideas of issues</td>
</tr>
<tr>
<td>Invitation to submit suggestions</td>
<td>Citizens submit suggestions</td>
</tr>
<tr>
<td>(e-) Referendum</td>
<td>Inform decision-makers about citizens’ view on a particular issue</td>
</tr>
<tr>
<td>Homepages</td>
<td>Inform and educate citizens about timely issues</td>
</tr>
<tr>
<td>On-line transmissions of meetings</td>
<td>Broadcast meeting for more transparent decision making</td>
</tr>
<tr>
<td>Citizen panel / “jury”</td>
<td>Getting information from a sample of citizens concerning an issue</td>
</tr>
<tr>
<td>On-line questionnaire / Survey</td>
<td>Getting opinions from citizens on particular issue</td>
</tr>
<tr>
<td>E-voting / Membership ballot</td>
<td>Getting opinions from citizens / members of a community on particular issues</td>
</tr>
<tr>
<td>“Your question”</td>
<td>Citizens ask questions to politicians</td>
</tr>
<tr>
<td>Public opinion messages</td>
<td>Citizens express their opinions</td>
</tr>
<tr>
<td>Real-time chat, Group-to-group chat</td>
<td>Citizens and politicians discuss about issues</td>
</tr>
<tr>
<td>Closed discussion forum</td>
<td>Party members can affect opinion within a party</td>
</tr>
<tr>
<td>Expert panel</td>
<td>Choosing appropriate background documentation for a targeted debate</td>
</tr>
<tr>
<td>Formal consultation report</td>
<td>Collecting viewpoints from targeted debate to decision-makers</td>
</tr>
<tr>
<td>Feedback about targeted discussions</td>
<td>Informing discussants how the discussion affects the decisions</td>
</tr>
<tr>
<td><strong>Direct Democracy</strong></td>
<td></td>
</tr>
<tr>
<td>User Registration</td>
<td>To get rights to act in the community</td>
</tr>
<tr>
<td>Open discussion/ idea forum</td>
<td>Raise new issues by the citizens and discuss about them</td>
</tr>
<tr>
<td>Decision-making on issues to be debated</td>
<td>Decide, which issues are to be debated and voted further</td>
</tr>
<tr>
<td>Targeted debate forums</td>
<td>Discuss about issues rose for formal discussion</td>
</tr>
<tr>
<td>Background documentation</td>
<td>Inform users about timely issues and decisions taken</td>
</tr>
<tr>
<td>E-Voting</td>
<td>Decide on how to act</td>
</tr>
<tr>
<td>Information about the party</td>
<td>FAQ, history, organization</td>
</tr>
<tr>
<td><strong>Partisan Democracy</strong></td>
<td></td>
</tr>
<tr>
<td>Discussion forum</td>
<td>Channel for expressing opinions with little or no visibility under the prevailing political system</td>
</tr>
<tr>
<td>Chat system</td>
<td>Synchronous system for short messages</td>
</tr>
<tr>
<td>Information Portals</td>
<td>Provide either information on a particular view or as much neutral information as possible</td>
</tr>
<tr>
<td>Newsgroups/Usenet groups</td>
<td>Asynchronous discussions, allow longer threads when messages are not in real time</td>
</tr>
<tr>
<td>Mail-based discussions</td>
<td>Asynchronous, introducing push-technology by sending mails to participants</td>
</tr>
<tr>
<td>Web Blogs</td>
<td>Broadcast citizen’s view</td>
</tr>
</tbody>
</table>

Table 2. Communication genres for different democracy models (Sæbø & Päivärinta, Forthcoming)
Steps | Participants | Outcome | Suggested tools | Relation to theory
--- | --- | --- | --- | ---
Identifying major stakeholders | Project initiators | A list of major stakeholders to include in the process. | Interviews, Mapping techniques, Workshops | A precondition, no direct connection to the theories involved.
Analyzing objectives and purposes | Stakeholders for the project | Stakeholders’ objectives are identified. | Interviews, Workshops, Surveys | Individuals’ objectives are identified according to the four Democracy models (table 1)
Consensus-building on main objectives | Stakeholders for the project | Common understanding of objectives in the project. | Workshops, Scenario building, Interviews | Objectives may be agreed upon, supporting one (or several) of the Democracy models (table 1)

Table 3. Steps, participants, outcome and suggested tools for the first phase of the process

Phase 2: Enacting identified purposes into suggested technological forms

The second phase concentrates on how to connect E-Democracy genres to the identified objectives. Phase 1 may result in an overview of what E-Democracy Model(s) to support. The identified E-Democracy genres (table 2) can act as a starting point for the discussion on possible E-Democracy genres supporting the(se) model(s). By for example presenting prototypes, stakeholders are given the opportunity to comment on the expected usefulness of different alternatives. Project owners may be in charge of making decisions on what to do and to make a list of potential possibilities and characteristics that should be supported by the forthcoming development process. Table 4 presents suggested activities for phase two of the process.

<table>
<thead>
<tr>
<th>Steps</th>
<th>Participants</th>
<th>Outcome</th>
<th>Suggested tools</th>
<th>Relation to theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying technological opportunities</td>
<td>Stakeholders for the project</td>
<td>An overview of different opportunities and reflection on the usefulness of different alternatives.</td>
<td>Prototyping, Pilot testing, Workshops, Interviews</td>
<td>Technological opportunities are identified according to the E-Democracy genres (Table 2) for the agreed Democracy Model(s)</td>
</tr>
<tr>
<td>Developing a prioritized list of objectives and possible genres</td>
<td>Project owners</td>
<td>Prioritized list objectives and potential technological forms to guide the forthcoming development process.</td>
<td>Workshops, Interviews</td>
<td>An overview presents the E-Democracy models to support connected to suggested E-Democracy genres (Table 2)</td>
</tr>
</tbody>
</table>

Table 4. Steps, participants, outcome and suggested tools for second phase of the process

DISCUSSION

Based on the suggested process any implementation of E-Democracy can be specific about the actual E-Democracy model and connected communication genres. These differences could be taken into account by the practitioners who may want to promote a certain kind of E-Democracy. Practitioners can utilize the suggested process to identify first the assumptions of democracy in the development context in question and second the particular genres of communication to be implemented in the system.

The research responds to calls for establishing theoretical grounds for the hitherto scattered field of e-government (Andersen & Henriksen, 2005; Grönlund, 2004), focusing on the issue of E-Democracy. By the suggested process E-Democracy researchers can be specific in relation to the suggested framework whether the target of his/her research contributes to one particular E-Democracy model or a combination of the models. Furthermore, the researcher can be specific when relating new knowledge to the field by identifying genres in light of the process. A new contribution can be identified as a genre instantiation supporting a specific E-Democracy model. Through such analyses the researchers can also inform the future practice of E-Democracy, offering lessons learned in a rather detailed manner.

I argue that the suggested process provides a basis for specified, cumulative, and proactive research efforts for E-Democracy, integrating theoretical and empirical literature of the field. However, more efforts need to be directed to further develop a
dynamic experience base discussing particular E-Democracy genres, allowing for cumulative knowledge among researchers and practitioners.

CONCLUSION

In this paper I addressed two identified problems (identifying main objectives and connecting main objectives to technological forms in E-Democracy projects) by introducing a two step process based on three streams of theories. The E-Democracy models allow identification and comparison of main objectives in the first phase of the process, while the bridging of knowledge on IT artifacts, genre of communication theories and the E-Democracy Models connect the identified objectives with technological forms in the second phase.

The process provides guidance to practice by identifying first assumptions of democracy and second the particular technological forms to be implemented in the system, being explicit on democratic communication and decision-making processes. More research is needed to further explore and explain the ideas of communication genres when new ICT and communication preferences are introduced, offering new opportunities for E-Democracy projects.

REFERENCES


