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# Applying an Ethical Perspective on Stakeholder Participation in Public E-service Development

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Abstract: In order to balance between citizen and agency aspects' importance and visibility in public e-service development, the question how to involve different stakeholders is often raised. However, identifying and analyzing several internal as well as external stakeholders in relation to e-government development raises some ethical questions: Who should participate and who should not? For what reasons do we involve stakeholders? What will the result of stakeholder participation and involvement be? In this article empirical findings from an e-government project are revisited and discussed from an ethical perspective. The main conclusion is that we need to consider ethical aspects of stakeholder participation in e-government projects more thoroughly. The ethical discussion in stakeholder participation rhetoric has often been shallow. An important task for e-government researchers is therefore to address this discussion in public e-service development, as the results in terms of quality of the e-services as well as citizen benefits are at stake.

## 1 Introduction

In e-government policies and visionary documents, there is often an evident rhetorical emphasis on the citizen perspective. In many governments' national action plans as well as in policies on EU level, citizen aspects are distinctly put forth [e.g. GOS08; MD09]. The primary goals with e-government is to make citizens' authority contacts as simple as possible, provide better public services, make governmental internal processes more efficient, and increase possibilities to participate in democratic processes. These goals obviously include both citizen and business benefits. In practice, we do however often see the totally opposite situation in many e-government development projects. The citizen aspects are many times given low priority in relation to internal agency efficiency aspects when conducting, for example, a public e-service development project [DNHLF05]. This situation seems to occur despite the fact that successful public e-service efforts depend on citizen engagement [JHI07]. In order to overcome this unbalance between citizen and agency aspects' importance and visibility, we have in several research projects focused on the question how to involve different stakeholders in e-government development [AML13].

Being an information systems (IS) researcher an interest in stakeholder involvement and participation in e-government projects comes rather naturally. In the IS field user participation has for several decades been regarded as a necessity to achieve successful IT systems development in organizations. This has been particularly evident in Scandinavian IS research [e.g. BB95; BEK87; IL98; K98], but can also be found in socio-technical approaches in other parts of the world [e.g. LH83; M83]. Applying stakeholder involvement and participation ideas when taking part in e-government project is, thus, not a far reaching step to take for IS researchers. However, when applying this view in the e-

government context, the two frequently emphasized stakeholders of e-government – agencies and citizens – appear to be much too extensive and heterogeneous to be meaningfully addressed in public e-service conceptualization and development [FSS07]. Instead, we need to identify and analyze several internal as well as external stakeholders in relation to e-government development [KWI11]. This certainly adds complexity to stakeholder participation in e-government settings and further knowledge is needed on how to accomplish successful projects [AST07; SS07].

In order to increase the scientific knowledge in this aspect, we have in previous work focused on the question if, and in that case, how and what the e-government field can learn from user participation concepts and theories in general IS research [AML10]. This resulted in formulation of three analysis themes, grounded in user participation literature, that were used in order to guide analysis of stakeholder participation and involvement in public e-service development projects. The analysis themes helped us to highlight different stakeholders' situation in depth (ibid.), but the ethical dimension of the analyzed projects was still hidden. In this article ethical aspects are therefore added to the analysis themes. Focusing on ethical dimensions of stakeholder participation in public e-service development raises several crucial questions: Who should be involved and who should not? For what reasons do we involve stakeholders? What will the result of stakeholder participation and involvement be? In this article empirical findings from an e-government project are revisited and discussed from an ethical perspective. The aim of the article is to focus the importance to add an ethical perspective on stakeholders taking part in e-service development within public sector. This is done by complementing the analysis themes proposed previously (ibid.) with ethical aspects.

## 2 Theoretical Framework

User participation in Scandinavian IT systems development has been proposed with workplace democracy as a key signature. In some approaches this has been taken so far that users and system developers are regarded as equal actors in the development process [H08]. This was particularly evident in the seventies and early eighties when IT systems were developed and implemented widely in organizations for the first time [e.g. BB95; BEK87; IL98; K98]. During the following decades user participation has continued to be an important perspective in IT systems development, although not always as radically applied in practice as in the early days. In parallel to this, we also find researchers who criticize the outcome of user participation when it comes to IT system success [LG04]. The paradoxes of participatory practices have been discussed [HW03] and the view of participation as the only way to go in IT systems development has been questioned [H99]. Regardless of these challenges, participation is still an important topic in the IS research field and also practiced in many development projects.

Emphasizing workplace democracy as a main objective in IT systems development of course has ethical dimensions. One of the main contributors to the user participation field was Enid Mumford, who created the IT development method called ETHICS [M83]. ETHICS builds on the socio-technical approach and stands for "Effective Technical and Human Implementation of Computer-based Systems". Besides the acronym, ETHICS also implies an ethical statement about including all stakeholders in the design process, enabling users to influence their future roles, and giving them a sense of ownership and control over the result [M96]. Despite this ethical dimension and ambition, ETHICS has later been analyzed by Stahl [S07] who argues that the method needs to strengthen the conceptualization of ethics in order to be really supportive in highlighting the ethical aspects of IT

systems development.

Information ethics is a research topic [e.g. F06] covering IT related issues such as privacy, intellectual property, access, digital divides, and data quality. Stahl [S07, p. 484] also includes human related topics like "replacement of human employment by computers, changing interpersonal relationships due to computer-mediated communication, gender issues in the ICT industry, and new power structures in organizations". Even though these topics have gained increased research interest in recent years, we still cannot say that an ethical dimension is usually applied in mainstream IS research [MW10]. Furthermore, focusing the relation between ethics and user participation is only one of many possible ways to address these issues. The contribution aimed for in this article is, thus, to explicitly put forth and discuss ethical aspects related to stakeholder participation in a public e-service development project.

As Karlsson et al. [KHSH12] state in a review of user participation research in public sector IT development projects, citizen participation is not a significant topic in e-government yet, although the need to involve external stakeholders in development is emphasized [e.g. JHI07]. This lack of external stakeholder participation in public sector IT development projects was our main motive for developing the stakeholder participation analysis themes in a previous article [AML10]. These themes were formulated based on a literature review of user participation research in the IS and the e-government fields and then applied to empirical findings from two e-government projects (ibid.). The theoretical background for these themes will not be repeated here, but can be found in [AML10]. In short the themes cover three aspects of stakeholder participation in e-government projects; 1) the practice of participation, 2) incentives for participation, and 3) organization of participation. Below, the themes are further discussed based on [AML10].

Talking about stakeholder participation as a known and well-defined phenomenon might imply that participation always is practiced in a conformed and in advance agreed way. This is not true; instead studies of user participation show that the *practice of participation* can differ a lot. In an early study of user participation by Cavaye [C96] six user participation attributes were defined; 1) type of participation (all users or representatives), 2) degree of participation (level of responsibility for the participants), 3) content of participation (involvement in different design aspects), 4) extent of participation (variation in scope in different phases of the development process), 5) formality of participation (formal or informal organization of participation activities), and 6) influence of participation (effect of participation on the development effort) (ibid., p. 312). These attributes have been widely used and adopted in IS research and are still valid. Important questions to pose regarding practice of participation, thus, cover who, what (content), how, depth (extent), quality, quantity/frequency, and setting/context.

Heeks [H99] discusses that the motivation for proposing participation in a project needs to be scrutinized. His reasons for this is that participation can be forced on a project, participation in itself does not make discrimination and other problems in organizations disappear, and the selected participants might be overrepresented by those who already possess power (ibid.). In order to handle these and other user participation problems, the decision that participation is appropriate in a project should be preceded by a discussion about *incentives for participation*. We need to know who wants to introduce participation and the reasons for this. We also need to question from whom participation is requested and if they are willing and able to participate (ibid.). Otherwise there is an obvious risk that we instead turn stakeholder participants into project hostages [e.g. KØ94] or create pseudo-

involvement [NN90]. Important questions to pose regarding incentives for participation, thus, cover reasons, roles, and perspectives.

Lynch and Gregor [LG04] studied 38 IS development processes from the perspective of user participation and systems outcome. Their results show that the degree of user influence in the design process impacts heavily on the outcome. Lynch and Gregor (ibid.) define user influence as being dependent on both the type of participation and the depth of participation, which can be related to Cavaye's [C96] participation attributes discussed above. It is important both to define the *organisation of participation*, to meet the demands of processes and outcomes, and to govern how stakeholder participation is practiced. As Lynch and Gregor [LG04] argue user participation is not enough per se; we must also plan and organize for participatory activities in a way that suits the aim of the project. Important question to pose regarding organization of participation, thus, cover prerequisites, processes, and outcomes (influence).

#### 3 Research Method

The empirical case discussed in this article was studied within a research project concerning e-service development in Sweden's public sector. The studied case was a project developing a public e-service for application of a provisional driving license. The main reason for choosing this development project as empirical grounding in this article is that it involves some important ethical issues related to stakeholder participation in public e-service projects. The research project was an action research project performed from 2005 to 2008. As many action research projects in e-government settings it had the twofold purpose of both developing and evaluating a public e-service. Action research is a qualitative research method that is widely used in the IS field [e.g., BM04]. In successful action research projects researchers inform practitioners and practitioners inform researchers in an equal and synergistic way [AW-H91]. However, many action research projects are found to be both time consuming and heavy to manage, as the approach can be highly personally demanding and challenging for the researchers practicing it [S09]. Avison et al. [AW-H91] discuss how the "double challenge" when trying to combine action and research creates many problems; e.g. regarding relevance and rigour in research, the situational dependency and the need for control structures in order to create rigour (ibid.). Despite these methodological challenges, the action research approach in our case gave us good access to empirical data. We could collect data in a trustful way and got a comprehensive understanding of the development process. The "double challenge" of action research was handled by us researchers who tried to be explicit about our different roles (when we acted as change agents or as reflective researchers) in every part of the project. We also made agreements with the practitioners about each party's responsibilities in the project, as a way of conducting successful action research.

Multiple data collection methods were used in the project. Researchers took part in project meetings (physically or over telephone). The roles of the researchers differed from being observers to active change agents. Researchers arranged modeling seminars, but also acted as critical reviewers of requirement specifications and prototypes of the e-service and IT system. We interviewed several actors involved in the projects frequently during the project. The interviewees had the following roles: IT strategist, development project manager, system manager, internal investigator, case officers, IT development manager, and external consultants. The case officers represented internal users and worked at some of Sweden's 21 County Administrative Boards. Interviewees in different roles were

selected in order to reach a broad view of opinions on the studied project. We asked open questions in order to find out how they understood the notion of e-service, what opportunities and threats they apprehended, which success and failure stories they had experienced, lessons to be learnt from the projects, and what kind of cooperation and coordination they found necessary for the development project. The interviews was semi-structured and semi-standardized, and were audio recorded. An inductive data analysis was conducted in a qualitative, interpretive way [W06].

# 4 The E-service Development Project

The purpose of the studied e-government project was two-fold; (1) citizens' authority contacts in driving license matters should be possible to conduct by using an e-service and (2) internal agency processes should be made more efficient. Three Swedish agencies were involved in the development project; Sweden's County Administrations (SCoA) (which organizes the 21 county administrative boards of Sweden), the County Administrative Board of Stockholm and the Swedish Road Administration (SRoA). SCoA was hosting and staffing the development project. Internal resources were complemented with external consultants since there was not enough internal competence for this kind of project at SCoA.

In Sweden anyone who wants to get a driving license, first has to apply for a provisional driving license from the regional CoA where he or she is registered. The application process described below is to a large extent reproduced from earlier articles about the project, e.g. [AML10]. The provisional driving license is approved if the applicant is judged by the regional CoA to be able to drive a vehicle in a safe way. Accordingly, the permit is an important means to achieve high traffic security. The permit application was paper based before the e-service implementation. A form was filled in, signed and sent by mail to the regional agency. The application has to be complemented with a health declaration, a certificate of good eyesight, and in some cases also an application that, e.g., a parent will be allowed to serve as a private instructor. Prior to the launch of the e-service these paper documents were manually received and reviewed by a case officer at the agency. The case officer also controlled if the applicant was punished for any crimes (e.g. being drunk in public places, drug possession, or any traffic misdemeanour). This information is registered in a crime record database, operated by the police, which the case officer had access to through one of SRoA's IT systems.

After the launch of the e-service, any information related to the application is submitted electronically to the CoA. The case officers use an internal IT system to view the applications. In unproblematic cases the application is classified as a "green case" by the system; i.e the provisional driving license will be granted automatically. "Automatically" here means that the case officer only has to approve the application in the system. In green cases the applicant also gets an a priori decision that the application will be approved. The provisional driving license is then mailed to the applicant within a few days. This process change means that now most of the case officer's time can instead be allocated for the "red cases", i.e., applications which require some kind of more complicated assessments and maybe will result in a denial. When the provisional driving license has been granted, the CoA reports this to SRoA in their inter-organizational IT system. When the applicant has completed the driving test and the theoretical test successfully, he or she receives the permanent driving license from the SRoA.

The project had no explicit policy for user participation when it started. The external stakeholder view

appeared to be more or less absent or at least not emphasized in the project group. Instead, the internal efficiency perspective was very much salient in the project. The result from the project (i.e. the eservice) was not the solution to any explicitly expressed problem outside the government agencies. The driving license issues were chosen as target for the project because these issues were supposed to be rather uncomplicated to develop an e-service for. The project mainly focused on how the e-service would influence the internal procedures and routines at the involved agencies. The external consultants had great opportunities to influence how the e-service should be developed and designed. User requirements were mostly formulated by the agency officers according to their prior experiences from direct citizen contacts and general impressions of citizen requirements and needs.

# 5 Reviewing Participation from an Ethical Perspective

As mentioned earlier, the stakeholder participation analysis themes that were formulated and applied to e-government findings [AML10] did not explicitly focus any ethical issues. Yet it is, according to the argumentation above, not farfetched to claim that an ethical perspective on stakeholder participation would add an important dimension to these questions. Thus, the empirical findings in the public e-service development project, introduced above, will now be revisited by using the stakeholder participation analysis themes, but this time ethical aspects will be added to each discussed issue.

In the studied e-service development project there was no citizen participation at all. The project group consisted of internal representatives in different roles and positions. Some external stakeholder participation occurred occasionally as representatives of driving schools' branch organizations were invited to discuss the project. External consultants had an important role in the project as there was little in-house competence in e-service development at SCoA. The e-service development mostly covered the transition from one channel to another; i.e. going from paper-based forms to electronic forms. The project's goal was to develop a public e-service for application of provisional driving license including the submission of the medical health declaration. The solution did not include any innovative changes or examples of new ways to handle the applications when introducing the electronic medium. Internal stakeholder participation in the project was mainly conducted in weekly face-to-face och telephone meetings. During these meetings system requirements, testing of prototypes, and system interaction were the main themes, implying that the project had a rather technical, IT system focus. As there were no citizens present in the project, citizen demands and problems were mostly caught by making assumptions based on the project participants' previous client contacts. The understanding of the citizen was, thus, based on secondary sources.

Participation is about inclusion, who are invited to take part? An equally important question to raise is, however, who are excluded? What are the reasons for exclusion? Stakeholder exclusion can be both legitimate and unjustified, but has to be based on consciously decisions. If stakeholders are excluded due to their invisibility, how can stakeholders be identified? Stakeholder identification is, thus, the first step to take, before being able to decide upon which stakeholders to include and not. If a stakeholder group is excluded and the demands of this group instead are assumed and maybe "guessed", the ethical problem is very evident. Can this be explained by an internal project perspective, or is it caused by a certain in-house culture in public agencies? This is an important question to discuss in any agency setting, both prior to and during e-government projects.

As described above, there was no citizen participation in the project. This was not discussed at all, but treated as a non-issue. The focus was on internal aspects instead, such as how to integrate the eservice to internal IT systems, how to change application handling processes in the organization, and how to find staff that could take part in the development project. Of course, citizens were discussed during the project, but always from the perspective of ¬an outsider. Citizens were seen as the receiver of the result (i.e. the e-service), but not as a potential active stakeholder or participant in the project. The in-house perspective on citizens were, thus, very obvious.

Many incentives for participation can be formulated. An important ethical issue is to discuss the origins of these incentives. Management incentives for stakeholder participation might differ radical from system developers' or users' incentives, as well as from external stakeholders' incentives. Positive aspects of participation should not be taken for granted in any project, but need to be viewed and assessed from different stakeholders' perspective before being decided upon.

When the project started the staffing of the project was done by recruiting persons with long experience of handling provisional driving license applications. Understanding of the internal processes, rules and regulations is of course necessary in this kind of projects. The persons that were chosen to participate also had spare time that enabled them to participate, which can be seen as a positive thing. However, this strategy might not be optimal if the project should be manned with highly competent persons who could contribute to the outcome in the very best way. Instead, the external consultants got a very powerful position in the project. Their early design solutions were to a high degree followed through the project without being questioned or altered. Even though the internal perspective was apparent in the project (compared to a citizen perspective), no internal command over the project outcome was taken.

What are the effects of excluding certain stakeholders? What perspectives do we miss? Are there winners and losers due to the chosen way to organize participation and in what sense? Does it differ in short-time and long-time? Any e-government development project that does not deliver the expected service or benefit to the intended user group has in some sense failed. The organization of participation in the project is one explanation to this. The ethical dilemma here is that both the agency and the citizens lose in this situation. At the agency the loss of resources is apparent, but also the missed chance to increase their in-house know-how for future projects. Citizens might lose faith in agencies as competent e-service providers.

The result of the project, i.e. the e-service for handling applications of provisional driving licenses, did not meet any outspoken demand of the citizens. The main target group of the e-service was teenagers between 16 and 18 years old, as they are in majority when it comes to applying for a provisional driving license. Many persons in this group turned out to be excluded from using the e-service as they did not possess an electronic identification (eID), which was the chosen security solution in the e-service. This obviously was a mistake that the project might have been able to avoid if adopting another stakeholder participation strategy, where citizens were actively participating in the project.

#### 6 Conclusions and Further Research

The aim of this article has been to focus the importance of adding an ethical perspective on stakeholders taking part in e-service development within public sector. In the empirical example,

above, the analyzed project has been examined by applying ethical aspects. This has resulted in new insights in the studied case regarding stakeholder inclusion and exclusion, different stakeholders' incentives for participation, and negative effects and losses caused by a certain project design. Even though an ethical perspective was not present during the data collection, it is obvious that there are many issues in this case that have an ethical dimension. The main conclusion drawn from this exercise is that we need to view ethical aspects of stakeholder participation in e-government projects more thoroughly. The ethical discussion in stakeholder participation rhetoric has often been shallow. An important task for e-government research is therefore to address this discussion in public e-service development, as the results in terms of the e-service quality as well as citizen benefits are at stake.

The theoretical contribution in this article is that the stakeholder participation analysis themes have been complemented with an ethical perspective. This makes the analysis themes more inclusive, as the ethical aspects presented as questions in the analysis above, can be used in future applications of the analysis themes. The increased discussion and understanding of the studied case is a practical contribution in itself, as the ethical aspects can help explaining actions and results of the project. This understanding also implies important practical lessons for future public e-service development projects.

In this article the application of an ethical perspective to a previously analyzed case can be seen as a test. By illustrating what understanding ethical aspects might add to the stakeholder participation discussion in e-government, this test has been successful. The next step in this direction would be to apply an ethical dimension during an on-going research project, in order to influence the outcome and increase the ethical consciousness in e-government settings in practice.

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