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Stakeholder Involvement in Public e-Service Development – Broadening the Scope of User Involvement

Ida LINDGREN

Department of Management and Engineering,
Linköping University, Sweden
ida.lindgren@liu.se

Abstract. This paper investigates if user involvement (UI) theory and theory on stakeholder theory (ST) can be merged to form a new theoretical entity that can inform whose voice should be heard in public e-service development. The investigation is based on a hermeneutic literature review and analysis. The result is a merger of ideas on *who* should be involved (extracted from stakeholder theory) with ideas on *why* this involvement should be organized (extracted from the user involvement literature). The paper presents research in progress, meaning that the merger presented is not particularly advanced. Still, this merger of ideas is substantial and important as it could function as the fundament for a more elaborate understanding of how to determine who should be involved in public e-service development. Involving the 'right' actors is believed to lead to higher quality in public e-services; therefore, advancement in our knowledge on how to identify these actors and finding better ways of involving these actors is needed.

Keywords: public e-service, development, user involvement, stakeholder theory.

1. Introduction

Public e-services have been developed and used by governmental organizations worldwide for some time now. Public e-services can be understood as electronically mediated services, provided by public organizations, through which users (citizens/businesses) and the supplying organization co-create some value through the users' consumption of the service [26]. The development of these services is steered by policies on the international, national, and local level; as well as based on expectations expressed by citizens. Still, the supplying organizations of these public e-services experience persistent problems concerning e.g., marketing existing public e-services in order to reach the intended users, and developing e-services that these users want to use. As a response to these problems, the e-government literature testifies on the usefulness and necessity of user involvement as a means to develop public e-services that meet the demands of their intended users [21]. This theme is particularly salient in the Scandinavian context (both research and practice); a context characterized by a political and cultural climate in which a relatively high degree of worker/citizen involvement is expected and sought after [13]. In line with this expectation, the governmental committee guiding e-government initiatives in Sweden (the e-

Delegation), has authored guidelines on how to develop public e-services in a 'demand-driven' manner, focusing on the needs of the intended users [11]. Despite considerable research and practice-oriented efforts to guide user involvement in the development phase of public e-services, achieving user involvement has proven difficult in practice [2] [3].

A frequent critique against user involvement (UI) literature concerns the meaning of 'involvement'; a term that is discussed as being too vague. In this paper, however, I argue that a possible reason for the persistent problems of involving users lies in the term 'user'. 'User' is most often associated with the people *using* a particular system; sometimes referred to as end-users. When looking closer at public e-service development however, several scholars have pointed out that there are indeed additional actors than the end-users who need to be involved in the development of these services if they are to become useful and efficient [3]. Therefore, alongside with the discussion on user involvement, stakeholder theory (ST) is gaining increased attention in e-government research and practice. ST is a theoretical framework aimed at helping managers to address questions about the organization's purpose and its responsibilities to specific actors; discussed under the label *stakeholders* [15]. ST supplies concrete tools for how to identify and manage important actors; several of these ideas have been successfully transferred to the public sector [7]. An important contrast between ST and UI involves underlying values; although ST is more inclusive concerning what actors should be involved, this stream of literature is typically written from a clear management perspective. Concerning the democratic ideals underlying the development of public e-services, it can be argued that ST lacks important sociopolitical ideals concerning democracy. These democratic ideals are however an integral part of the Scandinavian UI literature. This paper explores theory on UI and ST with the aim to answer the following question; *can user involvement theory and theory on stakeholder management be merged to form a new theoretical entity that can inform whose voice should be heard in public e-service development*? The result of this investigation is presented according to the following logic. First, user involvement is briefly discussed, followed by a section on stakeholder theory and management. These two theoretical concepts are then discussed in relation to each other. Last, a conceptual merger of these two theoretical ideas is suggested.

2. Research Approach

This paper is a theoretical essay discussing and relating concepts related to the active involvement of actors in the development process of public e-services. The paper is based on a literature review conducted as a hermeneutic process [6]; meaning that the review is shaped by the researcher's pre-understanding. The search is steered and broadened based on concepts identified in the literature. This is an iterative process in which the review and analysis processes are naturally intertwined; aimed at identifying themes, contrasts, and gaps in the body of literature on a particular subject [6]. The search is not conducted completely without structure. In this study, the search was in part conducted as a forward- and backward search; as discussed by Webster and Watson [38]. Such a search needs a point of departure. Concerning the ST literature, the starting point was the work on ST in e-government presented by Flak and Rose [14] and Scholl [33]. From these two publications, a backward and forward search was conducted in order to find key publications on this topic. Regarding user involvement,

the starting point was the nominal book by Schuler and Namioka [35]. Based on this approach, literature on user involvement and stakeholder theory was explored with the aim to better understand these concepts in relation to the public e-service development context. Parts of the reasoning presented in this paper has been presented and subjected to review previously [24] [25]. The feedback received previously has been used to refine the ideas and search criteria for finding additional publications for analysis. The review and analysis has been guided by the explorative purpose of investigating the meaning of 'user' in user involvement, and whether the 'stakeholder' concept can broaden our understanding of whose interests that need to be taken into account in public e-service development.

3. User Involvement in Public e-Service Development

In the Scandinavian research tradition, the emphasis on involving users in the development of technology and work procedures was introduced under the label of *participatory design* [13] [19] [35]. The participatory design approach stemmed from socio-technical experiments in the 1970s, aimed at increasing democracy in the workplace [12] [13], and successive political reforms that gave workers rights to influence the introduction and use of technology in the work place. In the participatory design approach, user involvement is discussed in both *political* and *technical* terms [13]. The political origin and focus is visible in the humanistic approach to user involvement represented by scholars such as Mumford [29] [30]. In this line of research, the focus lies on democracy in the workplace and workplace satisfaction as user involvement is seen as a means of warranting workers' work quality and designing systems that fit the workers' needs. This approach has an obvious bottom-up perspective on the actors in the organization and can easily be translated to the e-government context if focusing on 'citizens' rather than 'workers'. This view on involvement corresponds well with the ideas of increased transparency and democracy through active involvement of citizens in the development of public e-services [24]. The technical approach to user involvement, is visible in the general IS development literature, in which the focus lies on designing IT systems [27]. In this literature, user involvement is seen as a way of ensuring information and knowledge needed for designing high quality IT [36]. It is also seen as a way of stimulating user acceptance of new technology [10]. The perspective on the organization in this line of reasoning is typically 'top-down'; often from a project-management perspective. The technical approach to user involvement is useful also in the e-government context as involvement of users indeed can be a way of ensuring the required baseline information for designing public e-services that meet the demands of their intended users.

Over time, the participatory design approach evolved into distinguishable approaches, such as participatory design, user-centered design, and contextual design [22]. These approaches were developed and introduced in contrast to each other, but have come to resemble one another [22]. There are four features that these user involvement approaches have in common [8]; they all emphasize (1) the importance of system designers experiencing work practices first-hand; (2) the importance of ensuring genuine participation from involved actors; (3) the necessity of developing a coherent vision for the new system and work procedures; and (4) the importance of anchoring this vision with the affected stakeholders. There are scholars who claim that the approaches to user involvement still have important and differentiating features that

matter for the development of public e-services [21]. The argument in this paper, however, is built on the idea that these approaches are similar in most important respects. The author acknowledges that there are, indeed, various approaches to user involvement, but argue that these share most important features – at the very least the aforementioned four features. Henceforth, these theories are therefore treated as one, and referred to as *user involvement.*

The basic idea with user involvement is that "all types of users of a new system must be involved in different ways in the design of the relevant parts of a system" ([8]; p.120). Similarly, Iivari et al. ([20]; p.111) state that; "[u]sers usually are the best experts on the local work practices to be aligned with and to be supported by a system". Also in the e-government field user involvement in development to public e-services is promoted [2] and discussed [4]. In addition, the discussion on user involvement in e-government is accompanied by discussions on *user-* and *demand-driven development* (e.g., [11]). In practice, it is however difficult to motivate and organize involvement of users [17]; e.g., finding suitable user representatives for involvement [2]. As stated previously, in the Swedish context, the e-Delegation has authored guidelines for governmental agencies on how to identify the demands of the "target group", and how these demands should be taken into account when developing public e-services [11]. Publishing these guidelines was an important statement made by the e-Delegation, marking an expectation of a more user-driven focus when developing public e-services. But user-driven development seldom makes it past the rhetorical level [23]. In addition, when taking a closer look at these guidelines they contain no information on how to identify the target group of a given public e-service [24]. Furthermore, the meaning of the term 'target group' is not defined, nor problematized. These flaws in the guidelines leave each user of the guidelines with the task of defining the meaning of this term. This leads us to the core of user involvement; who is this 'user' that should be involved?

In the face of numerous studies on user involvement, the 'user' remains elusive when the studies are examined in detail [20]. Typically, the meaning of 'user' is broad; including not only those people interacting directly with the system. For example, Cavaye ([9]; p.312) states that users can belong to different levels of the organization and have different relationships to the system: "[t]here is senior management that may use a system's output and that is ultimately responsible for an organization's investments and profitability. There is middle management that manages and monitors the work affected by the system. Thirdly, there are the employees who carry out the work and who would interact with the system on a day-to-day basis". Simlarly, Damodaran [10] argues that users from top management, middle management and end-user representatives must be involved; these should be involved in several, and different, phases of the design process. The final end-users, also called 'first-level' or 'primary' users, are defined as the ones who will interact directly with the system as part of their work [10]. Putting these definitions side by side, it is obvious that they provide a varying and somewhat unclear picture of who the 'user' is.

Considering the variety of what actors are included in the 'user' concept, it is perhaps not surprising that user involvement in public e-service development is difficult. Several studies have illustrated the importance of identifying all potential actors affected by public e-service development, e.g., the work by Scholl [34] and Axelsson, Melin and Lindgren [2] [3], and some clarity seems to have been provided with the help of stakeholder theory.

4. Stakeholder Theory and Management

During the last decade, stakeholder theory (ST) has gained attention in the e-government field. A stakeholder is defined as "any group or individual who can affect or is affected by the achievement of the organization's objectives*"* ([15]; p. 46). The core of ST is the idea of *managing* stakeholders in various ways; managing the organization's stakeholders is seen as a way to ensure effective and efficient management [16]. The underlying logic is to first identify the organization's stakeholders, and subsequently decide whether these stakeholders should be involved or managed in some way. ST is highly useful for discussing the large variety of actors involved in e-government projects such as public e-service development; visible in the successful transfers of ST to the public sector [7] and the e-government context (see e.g., the works by Flak et al. [14] [31] and Scholl [33] [34]). The question of how to *identify* stakeholders is a research topic in itself. As a complement to general frameworks aimed at identifying stakeholders (the most cited being Mitchel, Agle and Wood's framework from 1997 [28]); several adapted typologies aimed at identifying stakeholders in the specific e-government context have been presented (*see* [3] [18] [24] [31]).

Turning to the *management* of stakeholders*,* many different meanings are put into the term stakeholder management. In a well-cited publication by Blair and Whitehead ([5]; p.155), stakeholder management is described as "integrates in a systematic way what managers often deal with separately: strategic management, marketing, human resource management, public relations, organizational politics, and social responsibility". Similarly, Heeks [18] state that stakeholder management includes a variety of activities; from active participation of stakeholders in the development process, to communication and expectation management, or financial rewards and punishments. An example of a stakeholder management strategy seen in the ST literature concerns identifying stakeholders' potential for cooperation with, or threat to, the organization or issue at hand; and subsequent suggestions on actions that can be taken in order to prevent or decrease threats (e.g.,[32] [37]). In short, and somewhat simplified, stakeholder management involves creating opportunities for stakeholders to adopt a supportive position in relation to the focal organization or issue. Stakeholder management may include direct interaction between managers and stakeholders, and can thus be understood as some kind of *involvement* of stakeholders.

Although stakeholder management as a term can be given a broad meaning and understood as a wide range of arrangement, it is clear that the main focus lies on the well-being of the core organization, project, or even management. Several scholars, such as Heeks [18], state that stakeholders should be identified by examining who has the power to make the project fail in some way, thereby illustrating a strong management focus. There is a normative strand of ST in which stakeholders are discussed from an ethical and moral standpoint [14], but the main values of ST in general still involve successful management and profit for the focal organization. The management focus present in ST is important to address as it captures some of the reality and issues of project managers; also in the e-government context. However, considering that those responsible for e-government initiatives must accommodate objectives directed both at the internal efficiency of the government, *and* objectives directed towards citizens and the society at large, the managerial focus in ST may however be problematic for public e-service development [24]. Putting too much emphasis on the views of the management may result in important stakeholders being

left out of the development process [1]. This may, in turn, result in public e-services that very few external stakeholders want to use, or unanticipated and undesirable influences on work procedures for internal stakeholders.

5. Stakeholder Involvement – a conceptual merger

As illustrated above, achieving user involvement when developing public e-services has proven difficult. When taking a closer look at the term in focus – the user – there is a great variety in how inclusive, or exclusive, this term is in the research literature. When moving our attention to guidelines targeted towards practitioner, there is a lack of clear-cut definitions of the 'target group' or 'user' that these practitioners are asked to let 'drive' the development of the public e-services. For practitioners wanting to organize user involvement in practice, there is little theoretical guidance to be had.

In the introduction of this paper, I asked if user involvement theory and theory on stakeholder management can be merged to form a new theoretical entity that can inform whose voice should be heard in public e-service development. As a possible step forward in clarifying the meaning of 'user' in 'user involvement', I suggest that the term 'user' is replaced by the term 'stakeholder'. The stakeholder typologies available in the e-government literature are more fined grained and more inclusive than the term 'user'. The e-government stakeholder typologies available in the literature include not only the 'user' but also e.g., lower level employees handling the output of public e-services, sponsors, politicians, system developers, and project management roles. As a result, involvement of actors can be discussed in terms of *stakeholder involvement*; referring to system developers' and project management's direct contact with other stakeholders when developing information technology (here, public e-services), covering several different approaches and methods.

Exchanging 'user' with 'stakeholder' means that the perspective from which the involvement is organized is shifted and broadened. Somewhat simplified, involvement of actors in the development of public e-services can be organized and viewed from three perspectives; bottom-up, middle-out, or top-down. Here, 'bottom-up' refers to when the perspective of the people at the bottom of the organizational hierarchy is used as the point of departure; whereas 'top-down' refers to when a top-management perspective is adopted. Last, 'middle-out' refers to the middle-management perspective (here, the project management perspective). E-government literature in general often discusses public e-service development from a citizen perspective (bottom-up) or a top-management perspective. Stakeholder involvement is however typically organized on the project level. In order to be helpful for practice, the perspective inherent in 'stakeholder involvement' should mirror the perspective of those responsible for organizing it in practice. By combining stakeholder theory with user involvement issues, I argue that a *middle-out perspective* is adopted. I aim to promote a discussion on public e-services from a citizen and a management perspective combined. A stakeholder involvement approach further implies that both of these groups are made up by multiple layers of people and processes that need to be taken into account when developing public e-services.

What I propose is not only an exchange of terms, but a merge of ideas. The reason for this merger is that I find the UI take on how to 'manage' people affected by new technology as more cohesive with the ideas of e-government and the development of public e-services. Considering that the goals of public e-services include both the needs

and wishes of the citizens, and an increased efficiency and effectiveness of government, it is vital that the project management responsible for public e-service development is able to expand their outlook to include all of these actors. It is also important to consider involving representatives of these various stakeholder groups in the development and implementation of the public e-service in various ways. This requires a more humanistic outlook on stakeholders than the one presented in the stakeholder theory literature. In this paper, the merger is constituted by combining ideas on *who* should be involved (extracted from stakeholder theory) with concepts on *why* this involvement should be organized (extracted from the user involvement literature). The merger is perhaps not particularly advanced, nor mature; the concepts are merely extracted and aligned. I believe that, with further work, these concepts can be elaborated and integrated to further inform involvement practices in public e-service development.

6. Conclusions and future research

Considering that the goals of public e-services include both the needs and wishes of the citizens, and an increased efficiency and effectiveness of government, it is vital that the project management responsible for public e-service development is able to expand their outlook to include all of these actors. This expansion can be made using the stakeholder concept. It is also important to consider involving representatives of these various groups in the development and implementation of the public e-service in various ways. This requires both a humanistic and technical outlook on involvement; such as the one found in user involvement literature. Respecting stakeholders' interests can lead to improved e-government projects that increase the government's reliability and political credibility, but requires that stakeholder interests are described and analysed using appropriate tools [14] [24]. Public e-services often affect external, as well as internal, stakeholders with legitimate claims regarding the e-service. These stakeholders are likely to have somewhat diverse views on the e-service, and it is not likely that all of these stakeholder views and objectives can be respected to the full. Hence, stakeholder interests must be analysed and prioritized in order to assess which stakeholder involvement strategies to implement. By doing so, the quality of the e-service should be improved.

In this paper, two ideas are merged by combining literature on how to identify and characterize *stakeholders* (extracted from stakeholder theory) with literature on *involvement* (extracted from the user involvement literature). The merger implies that ideas on stakeholder *management* have been excluded in favor of user involvement concepts. Furthermore, the merger entails an abandonment of the *user* term, as presented in the user involvement literature, in favor of the term stakeholder. The result is a suggestion that further conceptual work is needed on formulating a conceptual framework on *stakeholder involvement.*

The merger presented in this paper is not particularly advanced; the basic ideas are merely extracted and aligned. Still, this merger of ideas is substantial and important as it could function as the fundament for a more elaborate understanding of how to determine who should be involved in public e-service development. Involving the 'right' actors is believed to lead to higher quality in public e-services; therefore, advancement in our knowledge on how to identify these actors and finding better ways of involving these actors is needed.

The ideas presented in this paper constitute an important knowledge contribution but need to be elaborated further. With further conceptual work on this topic, as well as empirical application of these ideas, the ideas presented here can turn into a useful framework for stakeholder involvement in e-government initiatives such as public e-service development.

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