On the Evolution of E-Government: The User Imperative

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Abstract. This paper focuses the need for more research on user involvement and the investigation of stakeholders in e-Government initiatives. An investigation of existing work revealed a lack of research on those topics. As e-Government evolves and users mature, the value of their input can increase. The paper discusses the need and potential benefits of this approach. Finally, we suggest that existing stakeholder theory is investigated for adaptation into e-Government settings in order to map the complex body of interrelated stakeholders.

1 Introduction

E-Government involves using information and communication technology to deliver public services through digital channels. The benefits are expected to come from increased efficiency, better and more available services and increased participation and democratization [1].

Throughout the world governments are realizing the potential of placing traditional government services online [2]. This shift is considered to be a major transformation, not only an introduction of new technology [3], [4]. Varying degree of complexity and success are reported from different parts of the world. State of the art examples include Canada, Singapore and USA [5]. Others show that e-Government initiatives can be chaotic and unmanageable [1] thus demonstrating that the transition can be difficult.

Until now, the need for increased efficiency in public sector and the potential in information technology seem to have been the primary drivers of e-Government [6]. Little user involvement is presented in literature on e-Government development. This may be justified at an early stage of implementing new services. However, as users mature, we argue that their input is increasingly valuable in terms of improving the services and perhaps suggesting new opportunities.

IS literature argues the critical importance of user involvement in information systems design and development in general [7]. This point of view has only partly been emphasized in recent E-Government research. To investigate users there is a need for knowledge on who the users are. Little emphasize has been put on the identification of stakeholders in e-Government. This paper argues the necessity of determining and characterizing potential stakeholders as a prerequisite for identifying users.

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2 Importance of User Involvement

User involvement is commonly accepted as an important element in information system design (see e.g. [8], [7]). Barki and Hartwick [9] stress the need to identify users and user needs before an information system is designed and implemented.

Recent research has questioned the general assumption that user involvement leads to success [8]. Uncertainties on the real usefulness of user involvement add further arguments to an increased research focus on these issues. Public sector employees have traditionally performed the paper work in public administration. By moving towards e-forms, e-democracy and e-administration the citizens and businesses may perform more of the work themselves [1]. These groups may become even more important in the development of more sophisticated e-Government systems. By investigating citizens and businesses and their sevice needs it may be possible to add knowledge on their impacts.

It seems difficult to suggest improved products and services without knowing what the users really want from an e-Government system. To address this issue and provide a comprehensive understanding of user needs in terms of e-Government, we suggest an increased research focus on user involvement in e-Government initiatives.

3 Stakeholders

Krenner [10] and Heinderyckx [11] mention three groups of stakeholders of e-Government; public administration, businesses and citizens. Others present a slightly different grouping of different private and public organizations, customers and suppliers [12], [13]. Researchers have also pointed at the importance of knowing who the stakeholders are and what expectations and requirements they have [14], [15].

There is a certain criticism on some of the current initiatives in e-Government for being too much top-down managed [16], [17]. There has only been minor focus on other stakeholder group, like businesses and citizens. This may reduce the possibility of addressing the diversity of stakeholder requirements.

Stakeholder theory (see e.g. [18]) has evolved over four decades and has proven useful in determining stakeholders and unveiling their different requirements and relative influence on organizations. Kotter and Heskett [19] proved the importance of addressing all groups of stakeholders in order to obtain success. By restricting stakeholders to different groups with uniform properties, research may fail to investigate distinct differences within the groups. Stakeholders in the same group can have different needs and requirements. Contextual dependencies can give stakeholders different roles and expectations at different times. Government employees are also citizens, and businesses consist of citizens. What are the consequences of this diversity? Is it possible to divide stakeholders into different groups? By identifying different stakeholders and their characteristics, research could add valuable knowledge on actual users of an e-Government system.

4 Discussion

A potential problem with investigating user involvement is eliciting the user needs. There is a methodological problem with asking users about their future needs. How do users know what they would like to have before the service is offered them? There is a strand of theory on user involvement which may be useful in this context. There are some methodological approaches that can be useful to investigate future needs. Interviews, focus group interviews, prototyping or lab-experiences can be possible methods to use in this respect.

Research on user involvement may be even more important when digital government services become more familiar and usage matures. Users may increase their expectations and their possibility to articulate requirements. Research should therefore focus on initiatives that have been running for some time. Investigating best-practice cases may be one opportunity. It is also important to add knowledge on user involvement in failure projects. This may reveal differences between user involvement in successes and failures.

Different E-Government areas may be more influenced by user involvement than others. E-democracy is one part of E-Government initiatives where user involvement should be of a primary concern. Increasing the democracy participation is not possible without direct involvement by citizens and politicians. E-democracy project should therefore be investigated as regards to user involvement.

This paper argues the need for further elaboration of the stakeholders. Stakeholder theory state the general importance of knowing who the stakeholders are as well as identifying their requirements. This may be especially important when entering a transition like e-Government. New digital services and communication channels towards government may alter the traditional clustering of stakeholders. Digital divide may split citizens and businesses into new clusters of stakeholders.

We therefore suggest that introducing and adapting elements from stakeholder theory is investigated. Especially the grouping of stakeholders on different levels, as well as the nature of accountability for the different stakeholder groups, should be further investigated. This, or similar approaches, may provide the necessary tools to form an essential basis for the evolution of e-Government.

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