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Communicating vessels for relevant and rigorous eGovernment research

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Abstract: Several researchers have pointed out that the field of eGovernment suffers from a too short-termed, project oriented, retrospective focus and a naïve technological optimism. Reflexive, critical analysis, cumulative research and altered use of theoretical frames are asked for to increase the practical value of eGovernment research. However, in front of fulfilling such expectations the reality is that we get the research we are asking for, and we are asking for the research we know exist, and in this logic lies a lot of communicative challenges (as well as funding mechanisms). This paper tries to address this relation and does so by putting forward an initiative to establish a national network of eGovernment researchers and practitioners (from private and public sector).

1. Introduction

The relation between rigorous and/or relevant research is an object for discussion in almost all scientific disciplines and Information Systems (IS) is no exception [1], [2], [3], [4]. On the contrary, as a discipline closely connected to technological innovation and implementation as well as modernisation and rationalisation, it needs to constantly keep the discussion alive from both perspectives. IS research needs to be relevant to practice, through potential interest, application and accessibility, but also scientific rigorous through critical mass, long-term perspective and critical analysis.

In the field of eGovernment, the same discussion reoccurs in a most interesting study by Heeks & Bailur [5] where they state that even if the greater part of eGovernment research is highly practically oriented (often presenting development projects and case studies), it lacks in practical relevance since it is under-analysed, a-theoretical and seldom answers the question why some things happen but mostly, in retrospective terms, explain what has happened (*ibid.*). True relevance, i.e., research creating valuable knowledge, could on the other hand be claimed to be research that actually could enhance understanding and serve as challenging perspectives for decision makers and practitioners (*ibid.*).

These ongoing discussions about rigour and/or relevance highlight the complicated relations between practitioners and research communities and the lack of two-way contributions but, we would also argue; the lack of communicating vessels and meeting places. Not only in forms of poor distribution of research results to praxis, but also in terms of providing reflexive, critical and analytical input to decision makers to balance the input

they receive from producers and selling consultants (effects by increasing influence of marketing models in eGovernment is brilliantly addressed in Collins & Butler [6]).

This paper addresses this relation, illustrated by the example of a national initiative of strengthening the communicating vessels between research communities, practitioners and governmental actors (from local to national governments) by the establishment of a national network of eGovernment researchers and practitioners. It is a process in-being and should as such be regarded as a visionary endeavour with several lessons to be learned due to its innovative course of action. What is interesting in the context of this paper is the journey to establish the network.

After this introduction the paper has the following disposition; in section two the objectives of strengthening the relation between research community and practice are discussed. In section three, this paper's methodology is described in terms of a literature study and a case study. We are then discussing in what ways relevant and rigorous eGovernment research can be reached in section four, followed by a report of the establishment of the eGovernment network in section five. In section six, the results and practical benefits of enhanced communicating vessels are explored. The paper is finally concluded in section seven.

2. Objectives

There are several reasons for highlighting this topic, but the overarching interest concerns the effects of a weak relation between research and practice in a long-term perspective. And as such it also draws attention to how 'practice' and 'relevance' are defined. A possible beneficial activity is described in this paper, i.e., the establishment of a national eGovernment network, in order to identify hinders and facilitators to enhance communicating vessels between research communities, practitioners and governmental actors (from local to national governments). There are several objectives related to the establishment of the network; such as strengthening the eGovernment research community, facilitating cooperation between research groups, etc. An objective that has increased in importance as the network is growing and maturing is, however, the possibility to strengthen the weak relation between research and practice through network activities. A critical means to reach this objective is to initiate and facilitate communication between researchers, practitioners and policy makers regarding the future research agenda.

3. Methodology

To be able to approach the dilemma outlined above, a literature study were conducted with the purpose of finding ways to set up functional limits for the analysis. The guiding principle was of course to find earlier work related to 'relevance and rigor in eGovernment research' but also adjacent analyses were found to be valuable. Such as; how 'practice' is defined to be able to explore the relation between research and practice, the effects of the time-span on 'relevance' and value, and analyses of the adoption of ICT innovations in a governmental context to identify potential mechanisms behind weak relations between research and practice.

The establishment of the network then serves as a case study to explore and find important features to add to the discussion about rigorous and/or relevant research in the field of eGovernment. In addition, the case study could be seen as an example of how to

deal with the dilemmas that this paper tries to draw attention to. It is, however, a process-in-being and as such the conclusions should be carefully handled.

Moreover, besides the descriptive elements, this is a partly normative effort since it rests upon a notion that research should contribute to critical undertakings and that there exists a need to balance a one-sided economical rationality (marketing logic) often present in eGovernment development efforts today [6]. We argue that it is important to make a clear declaration about that.

4. Relevant and rigorous, in what way?

One of the major objectives of this paper is to draw attention to the effects of a weak relation between research and practice in a long-term perspective. One way of addressing this relation is to start off with analysing how ‘practice’ is defined and “to take the concept of practice more seriously” as Lyytinen [2] puts it. Thus, we do not only define ‘practice’ as developers, producers and users, but argue that practice also involves institutional settings such as participants in policy-making and decision-makers on different levels, in both private and public contexts.

By doing so, diverse agendas emerge. If ‘practice’ also contains decision-makers on a national level, such as under-secretary of states and secretary of states and on municipal levels such as municipal commissioners, it might draw attention to a different time perspective and a slightly shift of focus. Governmental objectives differ from private ones in several respects and so do the processes behind transformation due to demands of anchoring, legitimacy and accountability which also influences the pace.

Another interesting aspect is whether relevance for practitioners is only supposed to be “immediate solutions for CIOs [and], that they can digest in one afternoon...or is relevance also something that can elevate and reshape professional’s thinking and actions...” as Lyytinen puts it [2]. Maybe a bit bluntly phrased but the comment is nevertheless interesting. As Heeks and Bailur argue [5], if eGovernment research is under-analysed and a-theoretical it undermines the potential for enhanced understanding and challenging perspectives. And as a result, practical relevance in terms of reflexive, critical and analytical input is diluted.

In addition, which Benbasat & Zmud stated already in 1999, IS research often reports results from studies involving technologies years after the technology’s acceptance by practice [1]. On top of that, according to Benbasat & Zmud, IS research is less successful in developing cumulative research (even though this weakness has improved since 1999). For most phenomena being studied, a new theoretical frame is put forward instead of careful analysis of already existing frames. Strong theoretical frames with real value are rare. This is something that Heeks & Bailur [5] also emphasize as weak or confused positivism dominated by over-optimistic and a-theoretical work, which then do not add much practical guidance for eGovernment. Several studies on the state-of-art of eGovernment research underline this picture of a field where the main part of the contributions is project descriptions in retrospective [7], [8].

To come to terms with these difficulties IS researchers (which might apply also for eGovernment researchers) should (according to Benbasat & Zmud) focus on those fundamental issues likely to be important years from now, i.e., again encourage a long-term perspective [1]. And as Allan S. Lee states, be seeking relevance by criticizing and

challenging what is perceived as obvious [4]. The need for long-term perspective and future-oriented approaches in the eGovernment field is also emphasized by Dawson [9] in a recent study in search of a framework for future eGovernment research. Long-term perspective and future-oriented approaches are needed to avoid undesirable future scenarios, partly as a result of a technology-driven approach lacking a mission-centric view on eGovernment.

As mentioned in the introduction, another subject is the question marks surrounding the speedy adaption of ICT (e) innovation by the public sector in a new public management manner [6]. The confusion of the concepts 'service' and 'democracy', and 'politics' and 'administration' in eGovernment development [6], promotes domination by commercial and technical criteria since it declutches activities from politics and places them on neutral organisational management ground. However, none of these activities is politically neutral. Collins & Butler argue that the perception of the citizen as consumer is central. They claim that (i) rapid responses to consumer concerns, (ii) the extension of choice and customisation in product development, and (iii) the application of market research techniques are adopted from market logic into eGovernment transformation. This is, however, not done without complications [6]. In addition, as emphasized for example in the eGovRTD2020 project, there is a need to call attention to the fundamental mission and purposes in government, i.e., the core mission [9]. As a result of a technology-driven approach, many eGovernment projects do not start with the primary mission of government in mind [9]. It is, thus, important to provide public decision makers with tools to balance the input they receive from producers and selling consultants.

According to the discussion above, in order to improve, eGovernment research should (a) broaden the definition of practice (to enclose institutional settings and governmental actors), (b) broaden the definition of relevance (to include reflexive, critical and analytical input), and (c) change and expand the time span (to avoid short-term thinking and to encourage innovative research).

5. The establishment of a national eGovernment network

The network, called the eGovernment network (www.egov.nu), is a Swedish national network of eGovernment researchers (from varied disciplines ranging from political science, sociology, economics, information systems, etc.), practitioners and decision-makers in public and private sector (at different levels; national and local). It is initially financed by VINNOVA (Swedish Governmental Agency for Innovation Systems) and the overall aim is to facilitate knowledge distribution and the possibility to establish contact between researchers, as well as between researchers, practitioners and citizens.

The network should help its members to:

- find new cooperation possibilities
- cooperate across scientific disciplines
- distribute research results
- jointly discuss and illuminate the eGovernment field
- encourage knowledge development and create coordinative profits

It started as a result of a workshop on eGovernment held at Linköping university in June 2005. Since then the network has arranged three network meetings a year which have had about 70 participants in total (researchers, practitioners, and decision-makers). The

network meetings hold both presentations of research projects and general discussions (and panel discussions) about ongoing eGovernment development where *central key persons* (such as governmental representatives) have been invited and asked to participate. As an example, a theme for a recent workshop at the largest national conference in the public sector in Sweden, Offentliga Rummet (www.offentligarummet.se) was the Swedish government's newly launched action plan for eGovernment. Several reflections on this strategy and its possible consequences were presented by researchers and practitioners. The workshop was concluded by a panel discussion with all presenters.

A major intention has also been to consolidate disparate research groups to promote cooperation and avoid superfluous overlapping. As a strive to reach this intention, the network is today managed by a research council consisting of two representatives from four Swedish universities; Linköping university, Mid Sweden University, Blekinge Institute of Technology, and Örebro University. This implies that forthcoming activities will be shared between these four universities which also might increase the possibility to further reach practitioners in different parts of the country (as external networks connected to research groups).

Besides the network meetings, the network also cooperates in questions such as public/governmental post graduate positions (in line with industrial post graduate positions) to cope with the immense transformation of public sector. Other questions such as a united international master programme and national research school are also discussed. A public website (www.egov.nu) has been set up to both promote cooperation between research groups and between research groups and practitioners and decision-makers. The website holds several services such as news, presentations of research environments and researchers, practitioners, publications and network activities. An important service at the website is the possibility to download research publications. This is both a way for researchers to distribute their research results and for practitioners and policy makers to find these results.

The network has also got the assignment to support Vinnova in the planning of an EC ministry meeting on eGovernment to be held in Sweden in 2009. This is an important example of how the network can work to strengthen the relation between the research and political agendas.

6. Practical benefits of enhanced communicating vessels

As stated above, both relevance and rigor could, and should, be linked to practical benefits. But, as discussed in this paper, maybe not in the way it has been done earlier and maybe not in the most obvious ways. So, it needs clarifications. Resting on the arguments put forward above, in order to improve, eGovernment research should (a) broaden the definition of practice (to enclose institutional settings and governmental actors), (b) broaden the definition of relevance (to include reflexive, critical and analytical input), and (c) change and expand the time span (to avoid short-term thinking and to encourage innovative research). By using these arguments and return to the case put forward in this paper several features surface as important to investigate.

(a) The establishment of the eGovernment network has constantly tried to invite and attract both the public and the private sector. When given the opportunity, as when holding panel discussions or key-note talks for example, governmental representatives are actively sought (since private sector representatives are more actively participating by themselves

due to marketing mechanisms). Meetings with the governmental representative responsible for the national eGovernment action plan have been taking place. But even so, there is still much to be done in this area. In US, the federally funded DG research agenda has held workshops involving government officials in the process [10], [11], [12], [13] and that might be an interesting next step to further enhance the communication between researchers and practitioners (in private and public sector).

(b) The network has also tried to encourage critical analysis by pointing out a specific critical analysis workshop at a network meeting and by supporting the process of writing a book on the subject (with the working title: What is forgotten and hidden in Swedish eGovernment research). However, there is a communicative challenge to discuss critical analysis at the same time as economic growth, since these issues are often considered to be in opposition to each other. Adding a long-term perspective and sustainability (both economic and social) is, thus, helpful since it directs the attention to relations not that apparent at first.

(c) Furthermore, by trying to establish public post graduate positions the network tries to create opportunities for long-term research with another financial situation than what is often the case with short-term project financed research. As Grönlund & Andersson [8] state, one explanation for the high number of project descriptions in eGovernment research might be the funding mechanisms. Researchers are not given financial support for critical scrutiny and analysis but to act as helpers in product development (ibid.). The network has also created an opportunity to raise questions not that easy to get a glimpse of at first sight. eGovernment development projects are often quite limited in time and have prioritised goals, but the bigger picture that a holistic perspective might give is not given too much attention for obvious reasons. So, the time and opportunity for *reflection* and discussion, not that distinctly linked to a specific development project, is rewarding.

Another valuable lesson is that the establishment of the national eGovernment network creates a *platform* for further activities. It clarifies and facilitates communication, in both directions. Researchers now have a usable channel where issues can be addressed and cooperation is supported. For example, in the case of analysing the possibilities to create post graduate public positions, where a single research group might not have the same possibilities to reach equal results when it comes to acting as a pressure group on financing mechanisms. Furthermore, the network has reached the status of an easy to approach channel to the research community. For example, in terms of triple helix development projects it is easy to refer to the website for practitioners to find suitable partners.

One more beneficial effect is that the existence of the network has made visible that what is done is also analysed. Diverse eGovernment development projects are analysed in comparison with each other during the network meetings and it is easier to catch sight of shared dilemmas. This does also in the next turn highlight areas that need attention from the research community and, thus, probably also needs financial support.

Finally, it is of course important to state that these benefits, illustrated above, do not automatically occur as results of the network establishment. None of the benefits should be taken for granted, but we claim that the network is a feasible platform to achieve these and other benefits. There is obviously still much work to do, and real beneficial situations for both research community and practice will only occur if all involved actors are willing to support the idea of cooperation.

7. Conclusions

As Castells [14] (and numerous of other scholars with him) have pointed out, we are today experiencing a second wave of technological revolution; the information technologically tinged societal change. The first one, the industrial revolution, has been subject to vast research in retrospective (and several scientific disciplines prospered, such as sociology and organisational theory to mention a few) and several contributions were also made to both understand and improve the progress at the time. But it is also possible to claim that we still experience and try to correct the negative effects of an, at times, naïve technological optimism. Today we can see similar tendencies where the same naïve technological optimism is reproduced by large parts of eGovernment research [5], [15], [16]. The intention of this paper is to shift focus and engage in the opposite, without being contra-productive and pessimistic, i.e., a constructive attempt to create communicative vessels to ensure relevant *and* rigorous eGovernment research and *balance* the input to government from the market.

There are several ways to get on with such an endeavour and in this paper one of them is described, i.e., the establishment of a national network of eGovernment researchers and practitioners. The reason for describing it is that it might provide an insight to the experiences made and lessons learned. Not as measurable results to promote one way over the other, but as one possible way among others to highlight the difficulties eGovernment research are facing today.

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