

# Introduction to the Special Issue

## E-Government in Scandinavia

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## 1 Why This Special Issue?

This special issue of the Scandinavian Journal of Information Systems is aimed at contributing to the accumulation of knowledge of e-government research and practice in the Scandinavian context. We served as the guest editors. The obvious question that one can reasonably ask is why is there a need for this special issue.

The wide dissemination of the Internet has led to an increasing interest on the part of governments to leverage technology to offer better access and better and more efficient services to citizens, companies, and other parts of government. This is particularly attractive in the current climate of severe budgetary constraints in government. The drive to accomplish more with fewer resources has led to investing in information and communication technologies (ICT) to redesign internal and external processes based on the opportunities provided by technology. The possibility of increased transparency and democracy has also been a stated incentive.

At the international scene e-government research is moving away from conceiving e-government as an eral phenomenon with little or no link to the long history of computing in government. The e-government research field is gradually maturing with special journals, dedicated conferences and tracks at general conferences being launched as well as faculty positions and Ph.D. courses being offered. For example, at the DEXA (Database and Expert Application) Conference held in Copenhagen August 2005, a doctoral consortium on e-government was held. Øystein Sæbø, who is a co-author of one of the papers in this special issue, won the best paper award.

At the same time, there is a growing awareness that we need to carefully examine the current e-government initiatives in the light of the experiences and research literature published on IT in government prior to the internet. This is especially vital since knowledge on the nature, direction, and impacts of e-government are fragmented. One of the aims of this special issue is to contribute to the accumulation of knowledge of e-government research and practice. Yet, it begets the question: why Scandinavia specifically?

## **2 Why the Focus on Scandinavia?**

By most measures, Scandinavia is a melting pot for the use of digital technologies in government. First, by international standards, Scandinavian governments take up a large part of the societal resources and of the labor force. With 60-70% of the Gross Domestic Product (GDP) being reallocated through government and about one third of the workforce employed in government, it is perhaps not surprising that IT has been a key focus area for Scandinavian governments. Next, the Scandinavian model for participation at all levels of government and active aim at involving citizens and companies in decision-making processes from initiation to policy execution and evaluation, has led to the exploration and infusion of IT in democratic processes.

Given these unique Scandinavian administrative and democratic traditions, it is perhaps not surprising that Scandinavian governments have been among the frontrunners in showing enthusiasm for e-government by pushing ICT in intra- and intergovernmental operations and launching services for their external users. There is a long tradition of use of information and communication technology in the public sector. In the interest of brevity, we give only the example of Denmark. The context is not much different in the other three countries.

The first computer in Denmark was an arithmetic sequential calculator (DASK) with a RAM of 5 kilobyte and a hard disk of 40 kilobyte. It was donated by Marshall Aid in the 1950s and was in use from 1958-1968. The foundation for the streamlining of processes between government and citizens was laid during the late 1960s and 1970s with the deployment of the CPR (Citizens) and BBR (Building and Housing) registers. The computerization wave in Scandinavian government was not earlier than in many other countries, for example the US. However, it was more radical and much more comprehensive than comparable initiatives elsewhere, for example the Social Security Register designed in US in the 1930s or the French citizens register developed in the 1940s.

Within government operations, the document and record management systems developed by companies such as Scan Jour during the 1980s were considered world innovators. Perhaps even more importantly, the diffusion of the software to all key administrative tasks was much more widespread than in most other countries in the world. It is worth noting that the digital front-end services and digital procurement are not inventions of the e-government era. Touch-tone services and e-mail communication with government existed long before along with Electronic Data Interchange Systems where companies and public sector exchanged order and invoices often through third-party vendors/ Value Added Network operators.

As illuminating as this example is, there is a more compelling reason for the ready adoption of e-government in Scandinavia. This is tied to the issue of participation in democratic processes at local and central level that for a long time has had the attention of the international communities such as the information systems field. Perhaps the best exponent of the unique democratic practice in Scandinavia is participatory design. Workplace involvement in decisions on computerization of the workplace during the 1980s and 1990s when computers began to spread to the non-expert area of government can be seen as the Scandinavian road to early adoption of e-government by having employees conceive computerization as a friend rather than a foe.

Therefore it should not be surprising that in international rankings on e-government, the Scandinavian countries appear as not just good, but world class. Table 1 lists the rankings from Cap Gemini, Accenture, Economist, UN, EU, and OECD. These all have the Scandinavian countries at the very top.

<i>Source</i>	<i>Denmark</i>	<i>Norway</i>	<i>Sweden</i>	<i>Finland</i>
Cap Gemini (2005)	2	6	1	5
Accenture (2005)	5	15	7	6
Economist (2005)	1	4	3	5
UN (2004)	2	10	3	9
Eurostat (2005)	4	6	5	2

Table 1: International rankings on e-government, 2005

Yet there are good reasons to look beyond these rankings. First, they almost exclusively focus on the supply of services and therefore fail to look at the demand side of services and ignore the governance / governing part of e-government. Next, the international rankings measure mainly what is online, not back-office integration and interoperability. There is no direct link between the developments in these different fields. Sweden, for example, is advanced on on-line services but poor on interoperability because of its decentralized organization. Consequently, it is possible that other countries will surpass Sweden when such measures as productivity and user value are taken into account in these rankings. Clearly, there is a need to dig deeper below the surface. Hence, this special issue.

### 3 The Genesis of The Special Issue

The route to maturing this special issue started at a workshop on e-government at the IRIS26 Conference (August 2003) at the Haikko Manor, Finland. At the workshop we decided to pursue the idea of having a special e-government workshop during the winter season and held the first Scandinavian E-Government Workshop event in Örebro (February 2004) and matured further on at the workshop in Copenhagen, February 2005. Deliberations in these workshops led to the reflections described above and eventually to this special issue.

In answer to the Call for Papers sent out to several fora, we received several inquiries and abstracts. Out of them, we encouraged a limited number of

submissions that in our opinion met the requirements of the special issue. In all, 12 complied. The submissions came from all over Scandinavia (except Finland for some inexplicable reason), as well as beyond. These submissions underwent a double blind review process. Each paper was sent to two reviewers and one guest editor. Based on the reviewers' comments and the evaluation of the guest editors, five papers made through multiple rounds of revision and are presented in this special issue. The criteria for selection, apart from the usual ones of quality, relevance and rigor, included the two most important ones: that it addressed specifically the Scandinavian context, and that it addressed some of the current and future e-government challenges beyond what is on the web. Papers that did not meet the context test, but were found suitable in other aspects, were referred to the editors of SJIS for consideration in a normal issue of the journal.

## 4 The Papers

The papers in this special issue complement and contrast the glowing picture from the international rankings through less clear cut success on e-procurement, web-services, management system, and e-democracy in Norway, Denmark, and Sweden. Ilshammar, Bjurström and Grönlund set the tone by examining the historical perspective of computing in the public sector in Sweden. By emphasizing the substance of the rhetoric in this discourse, they concluded that a rationalization objective has set the agenda from the early days of computerization and continue to do so in the current e-government discussion. The implication is that the stated objective of service to the public has less substance than warranted by government pronouncements.

This issue is taken further by Flak, Olsen and Wolcott who studied municipal web sites in Norway. Their main finding was that, as measured by an instrument developed in US, the sophistication of these sites was quite low. This is an interesting finding to compare with the international rankings mentioned earlier. They also found that public service took a back seat to administrators' need for efficiency and cost reduction, thus echoing the assertion of Ilshammar et. al. The theme of prevalent rationalities other than the stated one of service is further reflected in the paper by Henriksen and Mahnke. They studied the slow adoption of a government e-procurement portal and found that political-structural elements characterized the public sector more than economic rationality.

That power and politics play a significant role in this context was also observed by Lines in his paper on the development of an e-government system

in a local health care organization in Norway. He concluded that IT was used by actors in a political power game to enhance their interests. The dynamics of enhancing one's political and social interests is further studied by Sæbø and Rose in their analysis of an e-democracy system. They found that there are vast differences in the expected outcomes of community participation resulting from different views of e-democracy between citizens and politicians.

## 5 Concluding Words

Taken together, the papers provide a good insight into the current state of e-government in Scandinavia beyond what's on the surface. It is unfortunate that Finland is not represented. However, we do not believe that a paper from Finland would substantively change the picture that emerges about Scandinavia and Nordic countries. We immediately recognize that a great deal of innovation is taking place *outside* Scandinavia. For example, Malaysia has developed MyKad which is a government multi-purpose smart card that integrates passport, ID, driver license, etc. into one chip-based card. Other examples that have become world class innovations in e-government include online visa applications in such backwater countries as Myanmar and Bhutan, e-voting in Estonia and India, and digital facial recognition in Pakistan. What is more interesting than to study these as simply innovations is investigating the drivers behind them. Facial recognition is implemented in Pakistan to prevent fraud while MyKad was developed because of pressure on government to be more efficient and be part of the ambition to turn Malaysia to a smart nation.

It will thus be unduly audacious and even sacrilegious to suggest that the insights provided by the papers in this special issue cover most of the issues on e-government in Scandinavia, let alone the world, or even the more important ones. Nevertheless, our hope is that the special issue will raise some thought provoking questions. If it results in inspiring and generating further research on what is behind the web surface of e-government, our efforts and those of the authors would have been justified. We are committed to pursue the Scandinavian perspective on e-government in workshops to be held at Agder University College, Örebro University and Copenhagen Business School. We hope that this special issue will help further the momentum built in the workshops held the past three years.

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