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Public E-Services in Sweden: Old Wine in New Bottles?

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Abstract. This paper describes and analyses the political discourse regarding e-government (including terms earlier used) in Sweden in the period from the 1960s until today, drawing on a review of policy documents. It is found that even though both the meanings ascribed to computers, the political visions, and the main arguments have changed considerably over time, the major plans for action have always remained the same. While goals related to democracy, increased service level, and decentralisation have at different times been at the focus of the debate, increased internal efficiency has always been the target for actions.

Key words: e-government, IT in government, ICT policy, political discourse.

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1 Introduction

> In many fields covered by the Information and Communication Technologies (ICT) policy, new ground is being broken, the issues are complex, and experience is limited. It is often the case that, when decisions are to be made, freedom of action is restricted by earlier decisions. What has happened is irreversible and cannot be done again. This means that it can often be of value to reflect, plan, and create knowledge and experience so that the right thing is done rather than making it necessary to be first at all costs. Processes with specific sub-goals, control stations, and successive evaluations of the situation including dissemination of knowledge and learning from the experience of others can lead to the achievement of the final goals more rapidly, even if the number one position is not held in every sub-process. To gradually introduce aspects of a learning ICT policy into the system, to systematically use in-depth studies of good models in important areas for Sweden are indispensable elements for making a durable and consistent ICT policy possible (Lundgren 2003, p. 12).

It is a widespread understanding that history never evolves in the same path, but sometimes history actually seems to repeat itself. At least the information society, if such a concept exists empirically, appears to arrive in waves or in cycles. During three periods in particular, the information society debate and the vast potentials of computers in the public sector have achieved particular political attention in Sweden. In the 1960s, Sweden went through a rapid and revolutionary computerisation process, which made computers one of the primary tools for mobilising resources to the expanding welfare state. In the 1980s, "information technology," as computers now were called, once again achieved the status of major catalyst for social and political reform in the aftermath of a series of crises. Finally, in the 1990s and early 2000s, computers, in marriage with the Internet to make up "Information and Communication Technologies," have become once more a favourite pet among politicians and public sector administrators. Catchwords like "electronic government" ("e-government," "E-Gov"), "public e-services," or in Sweden more often the 24-hour agency are used to suggest a rich potential for improving democracy, as well as for bringing better public services to citizens at lower costs.

This paper analyses and compares the Swedish e-government (and preceding terms) discourse during these three periods. The core issues concern what incentives motivated leading political actors to invest their influence in e-government-related questions and what arguments they used to market the ideas. Since the term 'e-government' was only coined in the third era, it might seem useless to look for an e-government discourse during the 60s. However, the

concepts and features associated with e-government are relevant to explore in each era. There is indeed a considerable scientific literature on "IT in Government" stemming from the 1970s, which discusses many issues relevant also to today's debate (Kraemer et al. 1978; Danziger and Andersen 2002). Focus here will be mainly on the rhetoric of key policy documents of their time, while the political outcome is of less importance to us. Neither will the paper scrutinise the role of computer technology in itself, although we are aware of the fact that rapid technological progress has changed computers to something totally different in the everyday life of citizens and administrators since the 1960s. In fact, our main proposition is that while technology has undergone revolutionary progress and transformation, incentives and arguments surrounding e-government have remained more or less the same. The arena where we set off to test this proposition is at the heart of political action in Sweden—the Parliament, as well as major public authorities and agencies, but first and foremost central government itself.

The method is, hence, doing a literature review from which we try to induce patterns in the use of 'e-government' and similar terms. After doing so, we will discuss the findings in the light of institutional theory and the institutional development in Sweden during the period studied.

The different periods we distinguish here—the 1960s, the 1980s, and the period around the millennium shift—clearly correspond to shifts in technology. The 1960s is the period of commercial use of the mainframe computer, the 1980s is the time of the PC advent, and the late 1990s is the Internet boom days. However, as this paper shows, there seems to be no technology determinism involved in political thinking. As we show, there is always a political agenda, and politicians always see ICT as a tool for achieving something on that agenda. The tool view has been strongly criticised in ICT research, but we show here that this is the view politicians—still—hold, even if the arguments they use allude to the visions of the time.

The paper proceeds as follows: After a brief background section, we spend sections 3-5 on describing the discourse of each of the three main eras. Section 6 summarises and analyses the findings. As this is a literature study using Swedish policy documents, there are many translations from Swedish, all of which are made by the authors.

2 Background

ICT belongs to what historian of ideas Svante Beckman (1995, p. 260) identifies as "the world-shaping technologies that awakes [sic] world-historical

imaginations and leads to grand speculations about how the world will be transformed by the spread of this technology." In almost any political speech or pamphlet from recent years, the public is confronted with the notion of a close and positive correlation between information technology, public services, and democracy. Among many good effects from ICT, more profound democracy, better services to citizens, and increased insight into the affairs of public authorities belong to the most widespread. The patterns are repeated in parliamentary and government bills as well as in manifestos from the political parties and in the public debate. This understanding of information technology as a new powerful tool in the service of the people can thus be traced much further back in time. The discourse that today often is labelled 'e-government' or 'e-democracy' has in fact accompanied the development of computers and ICT right from the early 1960s.

2.1 A Chameleonic Technology

The computer is frequently described as one of the defining technologies of our time. But what *is* a computer really? Computers often appear in chameleonic guises; they are incredibly plastic and can take on more or less any appearance (Hendriksson 1995), or as Ceruzzi puts it (1998, p. 307): "Between 1945 and 1995 the computer transformed itself over and over again, each time redefining its essence." Over the last 50 years, the understanding of what the computer is has repeatedly moved from one relatively stable state to another, often in relation to major societal changes of a political or ideological nature. Using a concept from the sociology of technology, it can be claimed that the computer-technical development is framed by an extensive *interpretative flexibility*. This concept belongs to the Social Construction of Technology (SCOT) school of thought, which describes how groups of both producers and users may interpret new inventions in totally different ways. The same technical artefact is thus of different significance to different groups. There is no objectively given way to design or use an artefact. What the artefact actually *is*—or rather becomes—is governed by its social context; there is interpretative flexibility, which causes new problems to arise; therefore, new solutions and models develop constantly. According to SCOT, a certain technology is not stabilised until consensus has been established on a specific design. This is called *closure*, and means that the interpretative flexibility ceases and the development process, for the time being, comes to a halt (Bijker 1987, p. 29 and 41; Pinch 1996, p. 25).

In the 1950s, the computer was generally regarded as an 'electronic brain' and 'math machine.' Its task was to make quick and exact calculations. Behind

the development of the first Swedish computers BESK and BARK were not the least military requirements. Consequently, computer development became a concern primarily for the government. However, concurrently with the development of their computing abilities and memory capacity, computers crossed the threshold into the offices of government authorities and private companies where they were used to render the work more efficient, compiling and sorting data in automatic records. The concept of ADP was born. As the computer engaged in an increasing number of civilian fields of application, technology development was no longer regarded as a central national concern, and the initiative moved from government to the private sector.

3 The 1960s—The ADP Decade

The 1960s in Sweden has been called "the ADP decade" (Automatic Data Processing or Administrative Data Processing; Johansson 1993, pp. 80-81; Bäck 1982, pp. 30, 75.). ADP caught on in earnest both in industry and the public sector. ADP became especially interesting when the growing public administration was to be rationalised in the meaning of increasing internal efficiency. In addition to calculations and administrative routines, the vision was that the new technology could be used for e.g. records management, statistics, planning activities, information searches, process control and a long range of other tasks (Johansson 1993, pp. 63, 74). This is not specific to Sweden but rather typical for most (developed) countries (Ceruzzi 1999, pp. 77-78). The objective was, however, not to decrease public spending as such; the aim was, as historian Thorsten Nybom puts it, "to rationalise and to render the work more efficient, thereby allowing scope for the increasingly demanding social and political reform policies" (Nybom 1980, p. 155).

Combined with the vision of the automated office, the rationalisation argument became the strongest driving force of computerisation. Technical and social engineering seemed to walk hand in hand, and it was the tax administration and the social sector that paved the way for the computerisation of public Sweden. The management of the social security system development, which began in the mid 1950s, brought along a great need for administrative means. Already in 1963, approximately one quarter of Sweden's computer fleet (about 130 computers) could be found within the public administration (Johansson 1993, p. 75).

3.1 From Math Machine to ADP

The political process in Sweden concerning computers had started in the 1940s. During the early Swedish computer era in the late 1940s and early 1950s, the computer was primarily envisioned as a calculator, called "math machine". Domestic development of computers was guided by demand for calculation capacity from the military and the technological research sector, and the manufacturing was conducted under state management with the "electronic brains" BESK and BARK as the foremost results, BESK being for a short period the fastest computer in the world (Glimell 1989, p. 15; Henriksson 1995, pp. 14-15). This orientation was due for change, though. Already in October 1955, the State Organisation Board (statens organisationsnämnd, SON), approached the new minister of finance Gunnar Sträng (Social Democrat) and pointed out that computer technology could be useful in state and public administration. In the first place, the units for input and output of data constituted the parts that made the computer more effective and subsequently interesting for administrative handling of large amounts of data. A computer was still expensive; on the other hand, it had a very high capacity. The board was, therefore, of the opinion that no single authority would be able to take full advantage of the machine. The new technology required coordination and centralisation within the administration (DeGeer 1992, pp. 45-46). At the time, SON still estimated that one single computer could cover the need for ADP in the whole nation.

Sträng then nominated a committee with representatives from both military and civil administration and the private sector to investigate how computer technology could be used to a greater extent within the public administration. The Committee on Automatic Data Processing (DBK) was increasingly to become the government's main policy body in computer issues and delivered its recommendations in two Government Public Investigations (SOU 1961; SOU 1962), forming the basis for the first ever Swedish Computer Policy Bill of 1963 (Bill 1963). The reports anticipated a great future for computers in the public sector and discussed their possible use in detail for no less than 34 different aspects of government activities. In most cases, however, the applications were registers and directories (SOU 1962, pp. 71-172).

Parallel to the DBK committee, a group of experts on organisation and administration from, among others, Statistics Sweden and the State Organisation Board came to the conclusion that development of computer technology created a potential for rationalisation of the extensive public records, mainly the national registration. The group, with its roots in the rationalisation movement from the 1950s, gave a very optimistic picture of the computer technol-

ogy and envisioned few problems (Johansson 1993, pp. 72-73; Glimell 1989, p. 18).

The technological progress during the eight years from 1955 to 1963 was very rapid. Sweden developed from a one-computer country, represented by BESK, to the concept that the whole expanding public administration could be rationalised and made more effective by the help of computers. The new orientation towards rationalisation of the administration moved the political focus away from design and construction of computers to their usage. As Johansson (1993) has pointed out, the technological policy of the rationalisation programme was first to obtain the best possible price/performance relationship, while the questions of where and how the equipment was manufactured became less important. In the government Bill on Computer Policy of 1963, state manufacturing of computers had ceased to be an option. Now the alternatives were exclusively purchase or computer rental, and several manufacturers were eager to get the government contracts. Technological development as such was no longer regarded as a core state interest (Johansson 1993 pp. 63-64, 73). Historian of technology Hans DeGeer argues that computer technology naturally over time came to be incorporated in the general principles for rationalisation that already had made an impact on public administration organisation. At the time of the DBK report, the technology had achieved such wide diffusion and become so integrated in the public consciousness that it no longer could be given any special treatment (DeGeer 1992, p. 125). In the Bill, the minister wrote:

> Through computers, the office sector has become involved in the possibilities to rationalisation of the work forms that the industrial sector already had access to earlier. The occurrence of computers means a leap in development of the technical means in the administration. Although these machines no longer constitutes [sic] an exclusive instrument but are today accepted as a means among others in the administrative sector, their potentials [sic] is still little used. The wider perspective that opens when the ADP-technology becomes more commonly embraced can in the present situation only be discerned (Bill 1963, p. 45).

3.2 New Role for Old Agency

The government's choice was to hand the coordination task over to the Swedish Agency for Public Management (Statskontoret), which recently had been transformed from its old role as state fund administrator to a modern rationalisation authority. Through the computer policy bill, it was now given 120 new employees. At the same time, the conception of computer technology as in

first place a tool for rationalisation within the administration was strengthened. Contrary to more recent periods, rhetoric was neither on better service to citizens nor on improvement of democracy (Glimell 1989, pp. 18-19; DeGeer 1992, pp. 111, 122-125), as the following quote exemplifies.

> It's natural that such possibilities for rationalisation that aim to limit the need for labour with in the office sector have constituted the main motive for the transition to ADP. Especially valuable is that the machines take over the routine part of the office work and frees personnel for more qualified and thus for the individual more interesting and meaningful tasks. The efficiency that a wider use of computer processing creates can be an even bigger factor for savings than the one that follows from reductions of personnel as such. The ADP technology can also realize goals that would otherwise be unreachable within the frames of available resources. Already there exist experiences of such significance that it gives reason to raise great expectations on the automatic data processing in this respect (Bill 1963, p. 45).

The ambition to promote the Swedish Agency for Public Management to a role as central rationalisation authority in the entire public sector was emphasised in further bills during the 1960s. In these bills, the agency was given resources and an organisation that would make it possible to realize the objectives that at least since 1963 had existed in principle (Bill 1965a and Bill 1965b; Nybom 1980, p. 177). At the end of the 1960s, the agency was estimated to be the single largest purchaser of computers in Western Europe, with an annual budget for computer equipment of more than 100 million Swedish Crowns (Annerstedt 1970, p. 140).

From 1965 and the following years, a number of new rationalisation agencies and authorities were founded in Sweden by initiatives from and also partly with their origins in the Swedish Agency for Public Management, for example, the Defence Forces Rationalisation Institute in 1968, State Consulting Co. (Statskonsult AB) in 1969, and the Computer Central for Administrative Data Processing (DAFA) in 1970 (Nybom 1980, p. 178).

Thus, the main motive for introducing ADP in the public administration was to render it more efficient, not to cut expenditures and save taxpayers money. On the contrary, the purpose was to allow the public sector to continue its rapid expansion. The rationalisation argument, combined with the vision of 'the automated office,' became the strongest argument for computerisation. The centralistic model had also become dominant. Strong, central actors with huge, centrally located computers were regarded the main alternative. It was the social sector that was to become the ice breaker for the computerisation of public administration in Sweden. The need for administrative tools was enormous to handle the great expansion of the social insurance system with its

beginning in the mid 1950s. As early as 1963, there were approximately 130 computers in use in Sweden, about 25 percent of them in the state sector of public administration (Johansson 1993, p. 75).

3.3 Government "Put on Data"

From the 'record years' of the mid 1960s and onwards, the rationalisation process accelerated; and, during the later part of the decade, a series of large-scale computerisation projects were embarked upon. The decade not only brought about rationalisation of government activities. In the spirit of the so-called rationalisation movement, trade and industry invested heavily in rendering their activities more effectively; aiming for maximum control of production focus, size, and quality, the rapid development of computer technology came to play a very important role (Johansson 1993, p. 76; Nybom, 1980, p. 150). Statistics Sweden's record on the total population (RTB) soon found its private sector equivalents in the shape of various commercial direct marketing records. In 1969, SIBOL (Cooperation for an Integrated Payment System On Line) was planned as a comprehensive system for payments on line. The idea was to replace cash with bank cards (SOU 1972, pp. 187, 205-206).

However, it was primarily within the governmental sector that large computer systems were developed and records containing personal data were "put on computer," which was the colloquial term of the time. From 1966, systems such as the Swedish judicial administration's information system (RIS), the national data system of the Swedish Enforcement Administration, the social security records, the National Labour Market Administration's information system, the central records of Swedish companies (CFR), the staff administrative information system (PAI) for all government employees, and the government finance administration system (system S) were added. In addition, a central population record (CBF), which would later, in the early 1970s, become a controversial issue in the Riksdag, was planned (SOU 1972, pp. 109-148).

The active role of the government sector and the fast pace by which large computer systems were developed and spread made Sweden, by international comparison, an early adopter of computer technology. This also meant that the computer safety discourse about central records, social security numbers, integrity and vulnerability started early in Sweden (Johansson 1993, p. 75; Glimell 1989, p. 11). From having been viewed as a harmless tool in the service of the engineering sciences during the first part of the decade, the computer increasingly became, during the second part, a symbol of the large-scale technology society and its downsides. Already in the middle of the 1960s, the

Riksdag began to pay more active attention to computer issues; and, at the end of the decade, an attempt to formulate an overall view of the role of computer technology in society was made. Political initiatives in the Riksdag showed a palpable increase in frequency from 1968 and onwards (Bäck 1982, pp. 170-171).

Above all, it was the threats to privacy that would upset the political sentiments when the debate culminated at the time of the national population census during 1970. More specifically, the notion of computers as a tool for control and surveillance was fuelled by the increasing use of records and social security numbers, together with statistical surveys and direct marketing. The expanding utilisation of computers thus came to be seen as an invasion of the privacy of the citizen. This debate led to increasing doubts about the social consequences from computerisation more generally and later resulted in the adoption of the world's first data protection legislation in the early years of the 1970s (Bäck 1982, pp. 170-171).

3.4 ADP for Rationalisation

To sum up, the national Swedish computer policies of the 1960s were marked by three characteristics. First, the interpretative flexibility was extended and technology ascribed new meanings. From having been viewed as large government calculators primarily used for defence and technical research purposes, computers became office machines. But the transformation went further. Towards the end of the decade, computers increasingly came to represent a Big Brother society. Second, there was a vision of the computer as an important tool in the transformation and rationalisation of the administration in the ongoing expansion of the public sector. Third, there was a neutral and non-ideological nature of computer policies. Computerisation was viewed as a rational and positive force in societal development, and political control or regulation seemed unnecessary. These harmonious views would, however, come to change fundamentally over the course of a few years, resulting in an increasing political tension over the future of computerisation in Sweden. As the scholar on the history of ideas Anders Carlsson has shown, there was, however, some discussion on the effects of the automation of the working life already in the middle of the 1950s. In the automation debate, which reached its height in the election year 1956, rationalisation, increased productivity, and an improved working environment were up against insufficient stimulation and threats of unemployment. The meaning of the concept 'automation' was, as Carlsson argues, by no means obvious. Common to various attempted definitions was, however, that there somewhere in the production process would be

a machine, a computer, which controlled the course of events. On several levels, dominating visions of technology, the math machine, and nuclear energy could be tied together. The electron, therefore, became the symbol for the automation project. Two catchwords in the Social Democratic 1956 election campaign were 'atoms' and 'automation' (Carlsson 1999, pp. 134-149).

4 The 1980s—Between Visions and Reality

Contrary to the 1960s, the 1980s started in a rather distrustful mood. Citizens in general, as well as political stakeholders, had turned sceptical to the promises of new technology during the 1970s, as it more than anything else seemed to create the conditions for a large-scale control and surveillance society. The two foremost technological promises of the 1960s, computers and nuclear power, now had become the principal symbols of an evil Big Brother. Subsequently, the first major political initiative of the 1980s was the formation of the Swedish government's Computer Delegation with an explicit mission to put the runaway computer technology back under political control. At the time computers, and consequently computer policy, had spread to cover much more than just the public sector. Industry, research, education, and—not least—working life were now on the agenda, and the delegation defined 108 (!) different aspects of computer policy that required some form of governmental intervention. Its final report sharply criticised both the narrow scope of earlier political handling and the actual implementation undertaken by various authorities (Ds B 1981; Bill 1982, p. 15; Henriksson 1995, p. 19; Bäck 1982, pp. 172-176).

Parallel to the widespread scepticism about computerisation and technology, economical growth ceased. The welfare society, deeply rooted in the interdependence between technological development and economical progress, seemed to be on the brink of its deepest crisis since World War 2. During the same period, though, a more deliberative and visionary debate about the emerging post industrial information society had started, inspired by the thinking of Daniel Bell, Yoneji Masuda, Alvin Toffler, and others. A major idea in many of these writings was that information technology would promote, or require, a transformation of democracy in the direction of more direct participation beyond the frames of the representative system. Masuda argued in his well known work "Information Society" from 1980 that the political system had to change from parliamentarian democracy to a participatory or direct democracy "in which the citizens themselves are involved in the politi-

cal decision making, both concerning the state and local self governance" (Masuda 1984, pp. 113-114; Gidlund 1986, pp. 141-142).

This debate with its sometimes utopian expectations about a future of electronic direct democracy would soon influence the political thinking in western society. When it did, it was in a slightly different form, though. In its redefined shape, the idea now was that computers and information technology would not deconstruct the representative institutions, like political parties and parliaments, but rather reconstruct and strengthen the bonds between citizens and representatives. The visions about a computer-aided renaissance for representation were, of course, fuelled by the fact that technology itself had undergone a paradigmatic transformation since the beginning of the microelectronic revolution. Computers were no longer the huge mainframes of the 1960s but the personal computer, possible to access and handle for each individual.

4.1 A Potential for Renewal

In short, the computer had become an everyday tool, and computing power was spreading rapidly to the desks and workbenches of millions of employees in both private and public sectors. Suddenly, the main question was not how to put computer technology under democratic control but how the computer in itself could promote better public service and contribute to democracy. Several of the government committees and investigations given the task of following up on the consequences of information technology and propose political measures during the 1970s and 1980s also noticed and appreciated the potential for public renewal. In the directives to the Computer Legislation Committee of 1973, Minister of Justice Lennart Geijer (Social Democrat) wrote:

> … computer technology, utilised in the correct way, can positively contribute to the general enlightenment and the informed debate. It is well in line with the motives behind the principle of free access to public records to make use of the resources of the new technology in order to, if possible, increase the access to information within public agencies. (SOU 1978, p. 375).

Already in 1979, the Information Technology Committee had anticipated that what at the time still was referred to as 'new media' would contribute to improved contacts between citizens and policy makers/administrators (SOU 1979a, pp. 56-57). Two years later the Committee was enthusiastic about the potential for deliberation. Information technology could support and enhance the expression of thought, widen the contacts between people, and even result in a decentralisation with new electronic information routes and meeting places in the neighbourhoods, the committee claimed in its final report to gov-

ernment (SOU 1981, pp. 133-137, 193). The new media in question were TV-text, teledata and fax. During the 1980s, both social democrat and non-social democrat governments repeatedly referred to information technology as a means to make representative democracy more valid. The ideas were marketed under concepts like "more public information to citizens" or "increased citizen involvement." In the computer policy bill of 1985, the vision was mainly about better access to political information through computer terminals and libraries, but also about decentralisation of computing power and interaction between citizens and authorities:

> The information flows in two ways. Individual citizens studying a municipal issue at the library will be able to communicate their viewpoints and ideas to the authorities direct through the computer terminal. The library terminals also give us a kind of 'letters to the editor' column where individuals and groups can bring forward ideas and viewpoints and elaborate on them. Such a debate can be undertaken locally in the municipality or over the entire country (Bill 1985a, p. 8).

According to the Bill, computer technology should contribute to the fulfilment of societal goals like a more democratic working life and a decentralised "rounder" (the commonly used expression alluding to the fact that Sweden is a very long country with long distances). Sweden where distance and geography no longer restricted people's choice of work or place of residence. The general orientation of the Computer Policy Bill echoed the Computer Delegation and its ideas about the need for a coordinated computer policy.

For that reason, it might seem ironical that the government now proposed a new organisation for the computer policy field. The computer issues no longer constituted an independent policy area, the government argued, and should therefore be distributed to the different ministries concerned. Thereby, the Computer Delegation was terminated and substituted by a new and more loosely organised working group of cabinet ministers. Its main task was to "carry out discussions on urgent computer problems" (Henriksson 1995, p. 20; Bill 1984a, p. 153). Simultaneously, the computer delegation's mission to produce research summaries and evaluations was moved to the Prime Minister's office.

None of the many computer bills, committees, and inquiries of the 1980s resulted in any significant political action to improve democratic participation, however (Ilshammar 1997, p. 9). One reason was that the reports suggested more general strategies rather than specific plans for action. Another, equally important, reason was that the political attention shifted from strategies to an increasing number of practical experiments with local ICT-mediated public information and services to citizens in the late 1980s and early 1990s (Åström

1999, p. 337). This pattern has also been obvious in a European context. After comparing a number of European and American e-democracy projects, Roza Tsagarousianou concludes that:

> In spite of the discourses of interactivity which underlie most 'electronic democracy' initiatives, most of them have in practice been executive-initiated, top-down and mostly based on giving more access to information. Politics in this form remains more of a model of convincing through the dissemination of information than of communication and discussion (Tsagarousianou 1998, pp. 174-175).

This relatively single-sided focus on information to citizens from above has recently been criticised by the Government Commission on Swedish Democracy, among others. According to the Commission, it is important to question what kind of democracy the information technology should benefit:

> The commission wants to increase the citizens' opportunities to influence the society. So far, information technology has mainly been used to increase information from political institutions—the technology has become a support primarily for service democracy or, as certain critics prefer to call it, 'spectators democracy' (SOU 2001, p. 98).

4.2 Rationalisation as Usual

What about rationalisation, then? This turned out to be the main theme for several of the committees, bills, and communications on computer policy from the government during the 1980s. Already in 1979, the Committee on Centralised Rationalisation and ADP had made it clear that rationalisation was to remain the focus for computerisation of the public sector in Sweden, now even more oriented towards real savings than earlier from the background of an escalating national budget deficit. For the same reason, the committee suggested actions to improve planning, control, and coordination of ADP activities in the public sector. Most important was to strengthen the government's actual capacity to govern the ADP activities (SOU 1979b, pp. 19, 123, 151).

In 1982, the Bill on Coordinated Computer Policy (Bill 1982) highlighted increased efficiency as one of the three main goals for computerisation of the Swedish public sector, together with greater influence for users and better information and services to the public (Bill 1982, p. 2). The Computer Policy Bill of 1985 (Bill 1985a) argued in its opening chapter for the same three goals for the renewal of the public sector and for the use of computers in this process: improvement of democracy, better services, and efficiency (Bill 1985a, pp. 16-17). In a subsection about the use of ADP in the public sector, the Bill

clearly stated that a more efficient public administration was the overall goal for the computerisation, though. Better service to citizens was secondary and democracy was not even mentioned.

> The authorities can, in their own mini computers, work on information collected from mainframes. The authorities are thereby given the possibility to, among other things, carry out follow ups and evaluations of their own activities. This should in its turn lead to a more efficient public administration. To a certain extent the technology can also be used to improve services (Bill 1985a, p. 150).

The rationalisation theme was further accentuated in a Special Bill on the use of ADP in public administration (Bill 1985b): "To increase efficiency and productivity ... extensive and systematic efforts are needed in order to develop the use of computers in the public administration." However, the Bill was unique in one respect: It showed a brief interest for experiences in the past by referring to some analyses that showed how the accelerating use of computers only in part had achieved the intended goals. To cure this discrepancy the bill argued for a more coordinated yet decentralised (e.g., concerning purchase of computer equipment) policy for the use of computers in the public sector (Bill 1985b, pp. 2-3).

In a Communication on Information Technology to the Parliament the same year, the government stated that the public sector showed many similarities to the private service sector when it came to preconditions for more efficient handling of office information systems for example. However, the public sector also had an important perspective concerning industrial policy. The Communication stressed that the public sector and its resources had potential as a driving force for industrial development. In fact the government planned to make this its main strategy for the overall computer policy (Communication 1985, pp. 15-16).

4.3 ADP for Public Savings

The rationalisation argument became even more evident in a later Bill on Computer Policy for Public Administration (Bill 1988). In spring of 1988, Minister of the Interior Bo Holmberg (Social Democrat) launched the concept of "active governmental mediating of information." (Bill 1988, p. 3) Thereby, he marked an ambition "to greater openness and better informational services towards citizens" (Bil 1988, p. 3) with the help of ICT and ADP. Holmberg emphasised that the public ADP-systems should be adapted to the Principle of

Public Access to Official Records (offentlighetsprincipen), not the other way around.

Most importantly, the bill stressed that ADP had an important role to play in the renewal of the public sector by shortening processing times, thus contributing to a more efficient use of resources: “Computer technology creates possibilities to make the public sector more productive. In many sectors, case processing is done faster and better than before through computerised or computer supported routines in some tasks.” (Bill 1988, p. 1) To support the rationalisation argument, examples of decreasing costs through computerisation were given from the Swedish National Labour Market Administration and the Swedish National Road Administration (Bill 1988, pp. 4-5). In a key passage, the Bill stated that:

> ADP development shall come about on the basis of administrational needs and with requirements for savings. [...] Investments in new technology should lead to savings that can finance the investment, but also give place for development of competence, improvements of the authorities’ service and other efforts to improve the authorities’ efficiency (Bill 1988, p. 15).

That was to say that the computer was still first and foremost a powerful rationalisation tool in the late 1980s. But unlike the 1960s, focus was now on rationalisation and savings to make the public sector more efficient, not on saving to allow a further expansion of the Swedish welfare state.

4.4 Rationalisation Rules

To sum up, the Swedish computer policy of the 1980s increasingly focused on using computers in the public sector as tools for better services to citizens and increased participation in democracy. This trend was a consequence of the new, more egalitarian understanding of technology when the interpretative flexibility once again was extended and computers ascribed new meanings, plus the powerful political visions of an emerging information society. However, the interest for services and democracy existed mainly on a general and rather unspecific level. In practice, the political agenda was still dominated by arguments about efficiency and rationalisation. The picture of the computer in the public mind had changed dramatically since the 1960s, but political ideas about its overall usage in the public sector had not.

5 The 1990s and the Early 2000s—Myths of the Millennium-Shift Matter

The 1990s and the early 2000s include what is known as the IT boom and bust. All this, within the decades that preceded and followed a millennium shift, gave rise to myths concerning the arrival of something spectacular and brand new, something that the world could hardly imagine only yesterday. A technological imperative, stating it held the key to future wealth, gained extended ground. IT was seen as a world-shaping technology, often discussed in combination with views on "a new economy" (Johansson et al. 1998; Beckman 1995).

5.1 Take-off by a Speech

In the spring of 1994, Swedish Prime Minister Carl Bildt (Conservative) gave a speech that set the tone for a public ICT rhetoric for years to come: "Sweden on its way towards a leading ICT-position" (Bildt 1994) This turned out to be a starting point for massive political activity aimed at establishing the ICT concept in the mind of the Swedish community. From that year on, ICT became the newest symbol of modernity, progress, economic growth, and public welfare (Ilshammar 2002, p. 17). The speech was followed by the initiation of the governmental ICT Commission, the assignment of which was renewed three times. This kept it alive for nine years, a remarkable length of time for a Swedish governmental commission. "Information Technology—Wings for Man's Abilities" (SOU 1994) was the portal document for the work of this commission in its first setting. It was followed by an extensive number of publications within its sub departments (focusing on, respectively, Judiciary, Commerce, Democracy and Citizenship, Infrastructure, and Competence), as well as a number of Commissions of Investigation.

One year later, the government put forward a bill on "Measures to broaden and develop ICT usage" (Bill 1996). It defined ICT policy as a strategically important area, aimed at *identifying*, *stimulating*, and *creating* needs, as well as possible means to meet these needs. Expectations concerned ICT's ability to develop new services and products that would reach wide markets and, thereby, create economic growth, for example. The potential of ICT as a tool for rationalisation to cut public expense—in sharp contrast to the 1960s when rationalisation, as mentioned above, was needed in order to facilitate public sector growth—was another expectation, as well as possibilities for politics and democracy to develop new forms for decision-making and debate.

5.2 Entering the Agenda within Agencies

Still, ICT policy was primarily a matter for central government and its commissions. In 1995, though, steps were taken that brought these questions into the corridors of several agencies as well. Leading managers of major government agencies, cooperating within a network called "Top Leaders' Forum," entered e-government-related questions on their agenda. At that time, the term 'e-government' was not yet in use; but, in the vocabulary of today, that is what it was. The overall aim of the Top Leaders' Forum was to encourage informal yet practical, cooperation and coordination among the agencies represented. This should be seen in the light of an old Swedish tradition of agencies holding a strong independence. The agenda of Top Leaders' Forum was gradually to become more ambitious and formalized, probably due to technical and economic development, as well as EU regulations.

This was also reflected in the government bill "An Information Society for All" (Bill 2000), casually referred to as the "ICT Bill," which was a close match to the EU initiative "eEurope" presented by the European Commission (European Commission 2000). The main thrust of the ICT Bill was of a visionary kind, foreseeing the effects of ICT without empirical support. Increased economic growth and regional development accompanied by lower unemployment were some of the important results predicted. Sustainable society, equality between the sexes, increased wealth, and higher living standards were others. The role of public administration was to act as precursor when it came to use of the technology and security-related questions. An ideological, as well as a commercial, policy cornerstone was stated in the very title of the bill, as well as in several places within the text itself: "The goal of ICT related politics in Sweden is to make Sweden the first country turning to an Information Society for all citizens" (Bill 2000). An information society for everybody represents a socio-technical deterministic view, ascribing technology characteristics such as "democratic" (Grönlund et al. 2003, p. 12) This Swedish ICT Bill, of course, was preceded and followed by other key documents of interest for us.

5.3 Efficiency and Democracy

The idea of the 24-hour public administration was officially introduced in a government bill in 1997, "Public Administration at the Service of the Citizens" (Bill 1998). The expressed overall goal was to make public administration more oriented towards the needs of citizens and companies than had been the case prior to this bill. In the process of change, administration must keep

public values in mind, as they are stated in the Swedish constitution: The legal security and equal treatment of every citizen, as well as democracy and efficiency. To increase integration of so far separate administrative parts of government bodies was one way of doing this. An important argument for that was that a citizen or a company often needs data from more than one agency to solve a problem. It should not be left to the citizen to collect the data from separate organisations, as this can be a complicated matter requiring considerable knowledge about how responsibilities are divided among different authorities. The bill manifests a change of view of whose problem that is. Where the traditional view left it to the citizen to take care of the problem, since different authorities in many cases did not, so to say, "speak to each other," a public administration at the service of the citizens should make sure that the citizen gets adequate help with his/her problem from one agency that also handled back-office matters.

The government expressed its intentions in five tasks:

- To formulate continuously the goals and follow up the results of the development of the 24- hour administration.
- To initiate solid forms of cooperation between central, regional, and local authorities.
- To test continuously ways to reorganise public administration to speed up development of electronic services and make good use of efficiency gains.
- To formulate, to a larger extent than before, specific goals for specific agencies concerning the development of electronic services (Sweden has a long tradition of agencies with far-reaching independence).
- To create support functions for development of electronic services that meet prominent citizen or company-related needs (as stated in the leaflet "On the way to the 24-hour Administration" from the Ministry of Finance (Finansdepartementet 2002)).

The Swedish Agency for Public Management (Statskontoret) was given the task of facilitating implementation and publishing reports and advice, as well as doing regular follow-ups.

Democracy-related questions were highlighted on the formal political agenda in the latter half of the 1990s. In 1997, Social Democrat Prime Minister Göran Persson and his cabinet formulated directives for a major Government Commission on Swedish Democracy (Demokratiutredningen). Four areas were specified upon which the commission was to concentrate its work. One of them was new informational and communicational patterns induced by ICT use and how these affected democracy (SOU 2001, p. 98). The commis-

sion presented, in all, 45 volumes on the way to its final report, "A sustainable democracy! Policy for democracy in the 21st century" (SOU 2001) in January.

With a text that states the value and importance of Swedish democracy developing in a more participatory direction, one is easily mislead to assume that "Sustainable Democracy" would praise the democratic potentials of new technologies. In fact, this report was less deterministic than many of the preceding government documents when addressing these questions. It critically stated that:

> ... up till now ICT has been used mainly for enhancing information from the formal political institutions. Thus, technology has strengthened above all a "service-democracy" or to put it differently, as by some critics: It has turned democracy into a spectator sport. (SOU 2001, p. 98).

The Government Commission on Swedish Democracy also addressed the issue of the underlying threat of the 'digital divide' between different citizen groups. Finally, "Sustainable democracy" pointed out a crucial fact—easily forgotten in the songs that praised the arrival of the new technologies as a salvation in itself—for tired or newborn and unstable democracies, namely the need to define what kind of democracy the government wants technology to improve and support (SOU 2001, p. 98).

5.4 Introducing the 24-Hour Public Agency

In the late 1990s and early 2000s, the use of computers continued to spread into most parts of society, including the households. A government program for tax-free rental of a PC with Internet access for employees within the public sector introduced in 1998 contributed decisively to this. The Swedish Agency for Public Management was given the task to coordinate and contribute to the implementation of the 24-hour public administration in an infrastructural as well as an organisational way (Finansdepartementet 2002, p. 5). Among its key documents in this area, we find "The 24-hour web. Recommendations and advise for the website of the 24 hour public administration" (Statskontoret 2002, p. 2). It contains the image of a staircase where each step symbolizes how far an agency has reached in its work towards fulfilling the demands of a 24-hour public agency. Guidelines on how to conduct such work are also included.

Another important document from the same agency was published in 2003: "Integrated 24-hour public agencies—A cohesive electronic public administration" (Statskontoret 2003). It focuses on the forgotten fact that the program of the 24-hour public administration per definition demands extensive reor-

ganisation within agencies and the everyday ways of conducting their work. Technical and infrastructural changes are not in themselves sufficient tools in the efforts to accomplish the vision stated within the 24-hour public administration (Statskontoret 2003, p. 9). The concept of the 24-hour public administration brought along the issue of public e-services. As mentioned above, e-government-related activities had in many cases only enhanced the information flow from government bodies to the citizens. Transactional services were (and are) still rather rare. A broadened discussion about the reasons for e-service, as well as its potentials in the public sector, came in 2002. Some of the most prominent arguments for increased use of ICT within public administration in (Western) European countries and the USA were said to be:

- Increased efficiency is vital for sustaining public sector service levels as an aging population leaves less people to support more in western-countries.
- Citizens get used to electronic services in the private sectors. (e.g. banking) That will increase their demand for greater efficiency and simplified access to public services.
- Diminishing participation in democratic procedures, like voting and party membership, creates a need for increasing legitimacy for the political system in other ways.
- Within the EU, there is a strong wish to diminish the gap between the EU and the USA when it comes to technological and economic development (Heeks 1999).

Obviously influenced by arguments of the kind listed above, in the summer of 2003, the Swedish government stated that ICT is a powerful tool for:

- Improving public sector activities, as well as increasing their efficiency.
- Increasing availability of important public service for citizens.
- Facilitating access for citizens to gain information from decision-making processes, as well as access to the processes themselves.
- Stimulating businesses to increase their competitiveness.

> Thus, ICT has the ability to promote sustainable economic growth, a high level of wealth for all citizens of our country, and a vital democracy (Kommittédirektiv 2003, p. 1).

The above standpoints led the government to appoint a new delegation for the development of public sector electronic services in fall of 2003. In the directives for the delegation, the government also pointed out the need for increased cooperation and coordination between public and private sectors, as

well as between ongoing researchers within the field (Kommittédirektiv 2003).

To sum up the national policies and rhetoric of the period, we find the following characteristics:

- Socio-technological determinism is present in public rhetoric.
- ICT is seen as per definition a tool for developing democracy.
- ICT is perceived as a tool for cutting costs in the public sector, which during the period is shaken by budget deficits, unemployment, and an aging population.
- The Swedish government openly has expressed that the old ways of agencies acting as isolated "stovepipes" (Stovepike is the commonly used word for government agencies each being vertically integrated but horizontally isolated from each other) will have to change. Documents express the need to change the focus of activities as well as the view of the citizens.
- Little coordination of ICT-related politics has existed between different ministries and governmental bodies.

6 Conclusions and Discussion

In this section we first summarize our conclusions, then discuss potential explanations and interpretations.

6.1 Conclusions

Table 1 summarises our findings as described in the previous sections. As shown in the table, practically all of the documents studied have one word on the bottom line as the plan for action: rationalisation. Although better services, democracy, etc. have been frequently on the agenda, especially during the last two eras, rationalisation as a tool for saving public money still dominates as the key incentive in the Swedish e-government discourse of the 2000s.

Rationalisation and savings seem to be unbeatable as driving forces when it comes down to hard politics. These incentives are apparently strong enough to overrule even the visions of a utopian information society and the promises of a more democratic, egalitarian computer technology. Thus, the internal rationalisation perspective has been guiding government ICT politics in Sweden during a period of four decades, in spite of a fundamental transformation in the common understanding of computers and information technology. In the intro-

duction to this paper, we raised a proposition, that arguments and incentives in the policy field now called e-government have remained more or less the same

Period	*Meaning ascribed to computers/ ICT*	*Political visions*	*Main arguments*	*Major plans for action*	*Main incentives*
1960s	automatic data processing	automated office	rationalisation	rationalisation	expansion of the welfare state
1980s	workplace toolbox	public sector renewal	service, democracy decentralisation rationalisation	rationalisation	public savings
1990s - early 2000s	communications central	24 hour public administration	service, democracy rationalisation	rationalisation	public savings

Table 1: An overview of the Swedish e-government discourse during four decades

since the 1960s while technology has undergone revolutionary progress and transformations. The documents, reports, and bills studied support that proposition. This appears as a paradox, as arguments should entail action rather than just being used as a discourse arena. Assuming, however, there should be some reasonable explanation(s), in the remainder of the paper, we will briefly discuss possible explanations to this seeming paradox.

6.2 Discussion

The main contribution of the paper is empirical. We have not looked for explanations in this paper, our main thrust was an empirical account of policies and rhetoric. Explanations may be sought in different directions, including micro-level theories explaining how ideas spread among decision makers, meso-level theories focusing on the mechanisms of organizations, or macro theories focusing on the societal level.

There are many theories that could be used for analysis, including more micro-perspective ones, such as Structuration theory, and macro-perspective ones such as theories of the State and the welfare society. The former would serve to explain how ideas of ICT use and national development spread (or

not) among people in decision making positions. The latter would serve to explain how the high-tax welfare state facing ever new challenges to make ends meet always tend to need to cut costs wherever that is possible and how IT then becomes another tool for that. Another kind of theories that might be applied include theories of communication, which might serve to explain how the ICT phenomenon spread rapidly across the world at certain times in history and induced politicians to act in similar ways in many countries. As it is not possible to cover all possible explanation models in one paper, we choose here to provide the empirical basis for further discussion.

Considering the macro level, one explanation to this seemingly paradoxical phenomenon, based on Swedish political history, may be that the Swedish government in plans of action routinely identifies with public agencies and authorities instead of citizens and that authorities identify first and foremost with themselves. In Sweden, with a long tradition of strong and independent authorities empowered to set their own agendas and with a small central government respecting authorities' autonomy and having limited power to control them, the internal rationalisation perspective has a strong foothold.

One way of understanding the phenomenon at an organizational level is provided by institutional theory. In (neo-)institutional theories, the formal (legal and political rules) and informal (culture, moral, etc.) institutions of society are considered to have an historical weight, leading to inertia that affects the actors in political and economical processes and restricts their possible actions. The economist Douglas C. North's concept of path dependence is often utilized to depict how institutions born in a certain environment live on, even if conditions change, and act as effective disincentives against radical change. Thus, the rules of society are partly composed of deposits from the past and, therefore, the future will be governed by history (Andersson-Skog and Ottosson 1994, pp. 2-3; Ingelstam 2002, p. 229; Blomkvist 2001, p. 44; Winston 1998, p. 11). In Sweden, a strong rationalisation movement, driven not least by the trade unions and the Social Democratic party, is a well established institution since the middle of the nineteenth century. This institution has been—and still is, though it does not exist in the articulated form of an organisation anymore—oriented both towards the private industry and the public sector. In the public sector, the overall objective has been to cut costs, first to allow further expansion and then to shrink and become more efficient for the purpose of saving public money. Ever since early computerisation in Sweden, there has been a broad understanding that technology carries a promise of accomplishing the public savings longed for. Therefore, computers and ICT first and foremost became a powerful rationalisation tool during the 60s, creating path dependence for the future. Thus, it can be claimed that when the

new technology was introduced and established in the public sector, the development became path dependent for a long time (Schön 2000, p. 525). In other words, if computer technology once had been defined as a powerful rationalisation tool, that definition was likely to stick to the technology, irrespective of what new and visionary fields of application would develop in the decades to come. Swedish political activities also seem to have been increasingly guided by a wish to comply with the political agenda in the European Union, with quite similar goals, hence creating another path dependence.

Although promotion of democracy and improvement of public services were frequently on the political agenda during the two later periods, these values could never compete with the strong self-interest for rationalisation in the government's plans of action. Computers and ICT for rationalisation showed a great economic potential and, therefore, were allowed to cost money, while e-democracy and public e-service, on the other hand, were praised by political decision makers but not given priority in the state budget. Compared to the rationalisation movement, the advocates for development of democracy by means of computers and ICT possessed very limited power resources. Chances are thus profound that path dependence will prevail and rationalisation and savings in the public administration will remain the main motivator for Swedish e-government policy in the future, regardless of what utopian pictures of an information society new meanings to ICT might give. The bottles are perhaps brand new, but the wine is likely to stay the same.

6.3 Concluding Remarks

The contemporary debate on e-government is much concerned with interoperability issues, often discussed in terms of Enterprise Architectures and other terms that have to do with a coherent strategy, resulting in standards for data, operating procedures, and ICT design and use. Many countries have adopted ambitious plans in this field, while others have seen a more unstructured development, among the latter Sweden. In a recent report from the Swedish Institute for Growth Policy Studies (ITPS), Swedish ICT policy is heavily criticised:

> The consultants that have collaborated with ITPS in this evaluation are of the opinion that Sweden has the lowest degree of political control among comparable countries studied, that levels of preparedness are relatively low, that in international comparisons Sweden is unique in not having produced goals for its ICT policy that can be monitored and followed up, and that Sweden, despite a high level of ambition and with many ongoing initiatives, lacks a strategy to achieve the strategic goals (Lundgren 2003, p. 11).

The report further states that "The ICT policy is characterised by shortcomings in the acquisition of knowledge as a form of support for development processes" (Lundgren 2003, p. 13). Above all, in the opinion of ITPS, three demands on a new Swedish ICT policy are important to make it successful: "It should have a long-term perspective and focus on strategic problem areas in society. It should be durable and consistent, i.e. learning. It should focus on the users and not on the producers" (Lundgren 2003, p. 13).

In many ways, these demands are consistent with our findings in this brief paper. Looking back on the three studied periods of condensed computer/ICT policy debate in Sweden, the absence of a learning, long-time perspective becomes obvious. The many bills, committees, and inquiries only rarely make any references to the outcome of previous periods. Experiences gained in the past are generally not valued or praised very highly, if they are at all noticed by policy makers. History and a learning perspective seem to be almost irrelevant in the debate, while the future and the utopian promises of ICT totally dominate the political rhetoric in all three periods. Moreover, the political focus is almost constantly on the producers of e-services, the public administration and the ICT-industry, not on the users/citizens.

What are the implications for e-government research? Having presented this rather depressing picture of the political discourse on e-government, how can e-government research help contribute to a discourse that is more aligned with contemporary views on ICT? Our explanations above suggest that at least to some extent the situation has developed out of specific Swedish preconditions, such as decentralized decision making, and may not apply equally to countries with a more centralised government structure. Other factors, however, such as the strong rationalisation impetus, are probably shared by most countries, at least those with welfare states where demands currently seem to outrun resources. Our main impression is that, in general, political IT discourse is disconnected from the general ICT discourse. We also suggest that e-government research could help bridge this gap in at least two ways. One would be putting more effort into investigating the relations between different e-government proposals—e.g., centralised solutions, such as the Enterprise Architecture model, and decentralised ones such as the Web Services model—and how these relate to different models of government, hence better understanding how ICT solutions relate to organisational structures and processes. Another way would be making more use of the quite substantial empirical material provided by the numerous e-government projects not only for research community discussion but also for practitioners in the policy-making field to use as material for understanding the role of ICT better.

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