Abstract
This study argues that electronic markets (EM) are not only used by public agencies for service delivery, but also feature in attempts to influence citizens to behave in line with public objectives like pension reform. The purpose of this paper is to contribute to e-government research by providing experiences and perspectives that go beyond the dominant paradigm of transactions. The aim is to study attempts to connect citizens to pension reform through EMs. The study applies the theoretical concept of enrolment, which emanates from Actor-Network Theory. This concept refers to a situation where some actors use technological devices to try to make other actors behave according to certain objectives. Based on a case study of pension reform in Sweden, which includes two different EMs, a broad analysis is made of the existing objectives and technological devices. The conclusion is that there are several important objectives: to provide services in line with the 24/7 ideal for self-service; to accomplish an active choice of premium pension funds; to improve knowledge about all pension sources; and to improve the quality of the individual's choice of funds. Different devices incorporated into the EMs were identified that had the intention of enrolling or connecting citizens to all of these objectives, thus demonstrating an important element in public policy implementation in pension reform.

Keywords: electronic markets, transactions, public policy implementation, pension reform

INTRODUCTION
This paper proposes that electronic markets (EM) are not only used by public agencies for service delivery but are also used in attempts to influence citizens to behave in line with public objectives like pension reform. The concept of EM denotes Internet-based Web portals connecting any kind of service providers or sellers with service users or customers regardless of whether they are situated in commercial (Rask and Krågh 2004) or public-sector contexts (Ranerup 2005).

Many countries in the industrialized world suffer from an ageing population where the number of retired people per employee is rising. Policymakers in those countries are often involved in plans to reform their current pension systems (Normann and Mitchell 2000). As a consequence of this, pension systems are subject of much debate, resulting in an animated discourse or in actual reforms designed to change the pension systems to meet the demands of this new situation. The exact content of these reforms might differ among countries, but a prominent objective is to increase the connections between received benefits, economic growth, and the individual’s activities in the labour market (Wadensjö 2005). A further element in the reforms in some countries is the introduction of premium pension schemes (Normann and Mitchell 2000; Sundén 2004). Sweden is similar to many other countries concerning their endeavour to introduce pension reform but it is unique in its use of EMs and in the degree of individual choice offered (Normann and Mitchell 2000; SOU 2005). In this paper, current experiences from Sweden are used in an analysis of how EMs appear as an element in pension reform.

There is a growing body of research into how EMs are used for public service delivery. Apart from analysing the provision of different types of services (Shackleton et al. 2005), the ‘one-stop’ concept for service delivery offering an infrastructure for transactions (Tambouris and Spanos 2002; Wimmer 2002), case studies of one-stop service delivery (Bannister and Walsh 2002) and frameworks for evaluations (Layne and Lee 2001) are recurrent issues. Further, current evaluations of the US, UK and the European Union suggest that ‘efficient’ provision of government information and public service delivery to ‘customers’ are the most common ideals today (Chadwick and May 2003).

It is interesting to note that pension reform pertains to a type of public policy implementation that to a considerable degree...
includes intentions to influence the individual citizen and his or her activities in the labour market (work) as well as the capital market (premium pension funds). More importantly, in the particular case of pension reform in Sweden, EMs are important in public policy implementation (Premiepensionsmyndigheten 2005b, SOU 2005). With this as a background, this research shows that EMs are used in attempts to enrol (Callon 1986) or connect citizens to political objectives in pension reform as outlined by authorities. At a general level, common objectives of pension reform are, for example, to influence the individual’s activities in the labour market as well as his or her retirement plans (Normann and Mitchell 2000; Wadensjö 2005); but other more specific objectives might exist. This study looks at a key aspect of this. With the help of prominent actors involved, we will pin down the main objectives and the associated technological devices appearing in pension reform in Sweden. However, the purpose is not to make a detailed account of the success of this endeavour in terms of the degree to which citizen behaviour is successfully influenced. Instead, this study is dedicated to the limited but still important objective of offering a broad and introductory picture of how certain technical devices in EMs are used by public authorities in attempts to enrol citizens to political objectives. The purpose of this paper is to contribute to e-government research through experiences and perspectives that go beyond the dominant paradigm of transactions.

The paper is organized as follows. First, there is a section on international experiences that aims to expand the framing of these issues. After that, the concept of enrolment is explained. Thereafter, there is a section on method. Then the analysis section describes the emerging objectives as well as the associated devices or functionalities in the EMs that are used as a means of enrolment. Finally, the implications from the study are discussed.

TAKING A QUICK LOOK AT EMS IN PENSION REFORM

Pension reform is on the agenda in many countries. A recent example is that of Denmark, which in 1999 introduced a reform involving a premium pension scheme with a supporting EM http://folkeborsen.tv2.dk. This EM has a limited outreach in practice since the savings in the premium pension scheme were postponed during 2004–05 and very few Danish people took the opportunity to pursue an active choice of premium pension funds. The UK and the US both have different combinations of public and private pensions, sometimes in the form of occupational schemes (SOU 2005). In the UK the Financial Service Authority expresses certain ambitions to educate people about pensions in general and about fees and other relevant facts associated with the different options available (SOU 2005). Pension reform in France in 2003 included more options for choice, but there are also plans for a more advanced use of EMs for pension information and administration (IDABC 2004). In Switzerland information technology (IT) is used within a decentralized administration of pensions, but there are a few attempts to introduce EMs for informing citizens about their personal contribution account, or making provisional calculations of retirement pension (Mänz and Trechsel 2004). In Argentina, Chile, Mexico and Poland pension reforms have also involved individual accounts and options for choice (SOU 2005). This means that more than a few countries are striving to reform their pension system, often by introducing individual options for choice. Sometimes information is said to frighten people, but information about the details of the pension system can also increase support for reform (Boeri 2004; Hedborg 1998), and is thus of strategic interest to policymakers.

During the 1990s there was also a lively discussion about the need for pension reform in Sweden. A decision in 1998 introduced the new system that included, among other things, a premium pension scheme. In 2000, a first round of choice of premium pension funds was introduced as a part of the premium pension scheme supported by the EM (www.ppm.nu) (SOU 2005, Sundén 2004). The pension system is public and mandatory, i.e. the entire workforce is included in the schemes (Engström and Westberg 2003). The activities in this respect have attracted international attention (Fagerström 2005; Normann and Mitchell 2000). In summary, the EMs of other countries play a limited role in reform compared to the Swedish experience.

THEORETICAL FRAMEWORK

The theoretical approach of this study is inspired by Actor-Network Theory (ANT) in general, and the concept of enrolment in particular (Callon 1986). ANT is a complex and continually developing theory emerging through seminal texts and authors such as Akrich (1992), Callon (1986) and Latour (1987). More recent contributions are for example Callon (1998), Law and Hassard (1999) as well as Czarniawska and Hernes (2005). This paper does not intend to contribute to the general theoretical development of ANT, but rather to benefit from it by applying a certain concept (enrolment) to a field of praxis (the role of EMs in pension reform). This approach serves as a basis for analysing how EMs with their respective devices are used by a certain type of actor (authorities) in attempts to enrol or connect another type of actor (citizens) to the public objectives of pension reform.¹

¹ The present study deals with issues of public policy implementation by means of IT. Other plausible theoretical frameworks in this field of investigation are
marked by considerable strength concerning institutional aspects (Anttiroiko 2004; Fountain 2001) in spite of the fact that technology is included in the models of reasoning. In contrast, ANT is especially relevant since it ‘takes technology seriously’, it is argued here, and gives due attention to nuances in the design and use as well as the role of different technological devices. It emphasizes how human actors use technology to enrol or connect other human actors to different objectives in order to elicit certain behaviour or actions. Thus, there is a networking dimension that includes humans and technology as well as a performative or action-oriented dimension in this framework, which adds a special value to an analysis informed by ANT.

The classic ANT study of the scallops, fishermen and ecological researchers in Brieuc Bay explores the concept of enrolment in a simple but telling way (Callon 1986). The study describes how one type of actor (the researchers) tries to enrol another type of actor (the scallops) to their own objectives; i.e. to get the scallops to act in a manner consistent with the activities designed by the researchers for growing scallops, and as a part of this, for the scallops to stay put on a rope used for these activities. The rope as such serves as an enrolment device employed in this attempt (Callon 1986). Callon (1986) suggests that enrolment is accomplished by getting another actor to follow or act in accordance with your own intentions: ‘Interessement is the group of actions by which an entity attempts to impose and stabilize the identity of other actors ... Different devices are used to implement these actions’ (Callon 1986: 207–8). However, in this particular case the scallops refused to act in the proposed manner or to behave according to the objectives of the researchers (Callon 1986). This means that the attempt to enrol the scallops to the aspired objectives failed. In conclusion, ‘Interessement achieves enrolment if it is successful. To describe enrolment is thus to describe the group of multilateral negotiations, trials of strength and tricks that accompany the interessements and enable them to succeed’ (Callon 1986: 211).

It is argued here that ITs such as EMs are especially interesting devices for enrolling actors. As non-human artefacts, they can be used as delegates for particular interests, as well as stand-ins and speakers for human actors (Bloomfield et al. 1997; Holmström and Robey 2005) such as the civil servants and policymakers that formulate the objectives of pension reform. A more specific current example of this perspective is Holmström and Robey’s (2005) longitudinal study into the organizational consequences of an online analytic processing tool in a municipal environment. Their study focused on the successive enrolment of diverse groups of actors within the organization to the implementation process as well as to modifications of their perceptions of the technology. Another example is the Norén and Ranerup (2005) study of how two national public agencies in Sweden used EMs in attempts to enrol citizens to public objectives in education. Their focus was on the technological devices used whereas the emerging objectives were investigated at a more general level. In contrast to these studies, the intention here is to account for the emerging objectives in the processes as well as to what extent they are part of attempts of enrolling citizens by EMs and their respective devices. This particular approach was chosen in order to make a knowledgeable, relevant contribution to the research field of e-government that, ideally at least, combines insights into public policy and technological matters (Bellamy and Taylor 1998; Grönlund 2002).

**RESEARCH METHODOLOGY AND CONTEXT**

This paper presents a single case study of an innovative and to some extent paradigmatic character (Flyvbjerg 1991). The Swedish case is unique concerning the degree to which EMs are used by public authorities as well as the level of involvement of private agencies. The Premium Pension Authority with its EM www.ppm.nu and the public–private partnership MyPension in Sweden Ltd (Min Pension i Sverige AB) with its EM www.minpension.se are new and both agencies put great emphasis on the use of the Internet as a means of communication with citizens. A second public authority is involved in the administration of pensions: the Social Insurance Board. It has a longer history than these other agencies, but their strategy regarding the use of the Internet towards citizens is similar. Their EM, www.forsakringskassan.se, contains some facilities to support prospective pensioners but is excluded from the present study since it mostly deals with applications for retirement. However, two of its civil servants working with project management were interviewed with a focus on their involvement in the design of the EMs under investigation.

When conducting a study based on ANT, researchers must carefully choose a group of actors to follow (Callon 1986). In this research, we have decided to follow actors in the agencies that have deep knowledge about the design of the EMs and their respective devices. These actors also have an insight into the public objectives of pension reform. This means that this paper benefits from eight interviews with seven civil servants and one managing director all of whom worked with the design and project management of the two EMs studied. The interviews lasted between 60 and 180 minutes and were recorded on tape and subsequently transcribed. The aim of the interviews was to get general knowledge about the history of the EMs as well as to gain knowledge of the most prominent objectives of pension reform and the associated use of EMs. Another issue was to collect information about the current and planned devices of the EMs. Asking the interviewees about the intentions of
all available devices used with the EMs was an important part of the investigation method. In so doing, the intent was to capture as closely as possible the views and accounts put forward by the actors themselves, which is an important point in ANT (Latour 1991). Further, documents containing the objectives of pension reform in general, and the role of EMs in the involved agencies in particular were also used. A final type of data was collected by a detailed analysis of the devices of the EMs www.ppm.nu and www.minpension.se.

There is no intention here to present a full account of all existing objectives, but rather to summarize what the involved actors perceived as important. This means that in the analysis all the interviews were compared in order to increase the validity of results. Thus, the aim was to construct an account of important activities and objectives that were highlighted during the course of the investigation process. Equally important, the analysis of the EMs was pursued by searching for functionalities or devices that are directly related to the different objectives as encountered in the interviews and documents.

In a study focusing on how electronic markets are used in attempts to enrol and connect citizens to the public objectives of pension reform, a relevant methodological approach would be to include not only civil servants but also citizens among the interviewees. This would make possible an analysis of the whole process including the final result. However, including citizens’ views and behaviour associated with the objectives and devices in order to determine the success of these attempts is outside the more limited scope of this paper.

**RESEARCH FINDINGS**

We continue by describing the actions and negotiations taking place during the course of the process and the public objectives and devices in this. A final decision about the new pension system was made by the Swedish parliament in 1998 (Socialdepartementet 1998). In an attempt to make the system financially viable it was built on defined contributions rather than defined benefits. The system has two parts: one pay-as-you go scheme and one premium pension scheme, both based on individual accounts. An obligatory fee is charged on all earnings, of which 16 per cent goes to the pay-as-you go scheme and 2.5 per cent goes to the premium pension scheme (SOU 2005). Most adults have a supplementary pension from an occupational scheme (Wadensjö 2005). An important aspect of the pension system is the objective that all incomes earned during an individual’s life will affect the received benefits in the pension scheme (SOU 2005). A further important feature is a premium pension scheme offering individuals a choice between hundreds of funds. For those who make no active choices there is a ‘default fund’ administered by the state. During this first year of the new pension system the objective of an active choice of premium pension funds was promoted in official policies (SOU 2005) as well as in information campaigns (Sundén 2004).

In 1999 a new government agency, the Premium Pension Agency (PPM), was founded to provide information about the premium pension part of the new system as well as to act as a clearing house (Sundén 2004). The Internet was perceived as important by the new agency, meaning that the main means of contact with citizens should be in line with the objective of the 24/7 ideal for self-service (Premiepensionsmyndigheten 2005a, b). The EM of the PPM www.ppm.nu was launched during the first year of the new pension system (1999). An interviewee at the PPM characterized the role of the Internet for this agency as follows: ‘Since PPM is a new authority, there was an intention that as much as possible, the interactions with the clients should be pursued by facilities for self-service. Therefore, the basic strategy has been to try to steer people into using the portal.’

At that point in time (1999–2000) www.ppm.nu contained no devices for pursuing the choice of premium pension funds. Instead, the choice of funds was pursued by a telephone helpline or by standardized paper forms (Premiepensionsmyndigheten 2005b).

However, since 2001 the EM of PPM contains a first section of devices that provides information about the pension system in general and the premium pension scheme in particular. In order to adapt to individual needs and to increase usage, there is always superficial information as well as one or two levels of more detailed and specific information. A standardized example of future pension benefits is also available. There is information that describes how all incomes earned during the individual’s life affect future pension benefits from the public pension scheme and the occupational scheme, as well as a link to the related EM www.minpension.se (see below). A second section contains FAQs with a focus on premium pension funds. A third section contains information about the premium pension fund choices that are available. The user is able to search among the different types of funds and make a selection of up to five funds that can be compared in terms of the historic return on investment. There is also general as well as special information about different types of funds, the risks with different types of funds, the fees charged and information about fund companies etc. A fourth section is protected by an individual password. Here, the user can find information about his or her holdings and their value. Also, it is possible to go to the third section and use the facilities for comparing funds and then transferring the result to change the composition of one’s portfolio.

Every year information about the individual citizen’s premium pension account and a forecast about future public pensions involving premium pensions is sent out
in February to those that are included in the scheme. In 2005, 5.4 million people out of a population of 9 millions were part of this scheme. ‘The Orange Envelope’, as it is called, is used to promote www.ppm.nu and its devices.

As indicated above, the Social Insurance Board is another leading public agency that is involved in pension issues. The Social Insurance Board, the PPM and the Swedish Insurance Federation were leading actors in a public–private partnership resulting in a second EM for pensions: www.minpension.se. During the 1990s different issues in relation to the new pension system were on the political agenda in Sweden (Wadensjö 2005). In this debate, the managing director of the Social Insurance Board, Anna Hedborg (1998: 4), argued that:

The existence of trust in the new pension system irrespective of ups and downs in society’s economy and changes in life expectancy among the population was a fundamental feature of this new system. Therefore, it is worrying that almost seven out of ten in Sweden believe that their future pension will not be sufficient.

To solve this problem, she argued, an EM should be introduced to provide information about individual benefits from the public pension scheme as well as the occupational schemes (Hedborg 1998). In order to accomplish this objective of building trust in the new pension system through a new EM and better knowledge about all sources of pension benefits (Hedborg 1998), all fund companies included in these schemes would have to provide data about individual contributions. The PPM, the Social Insurance Board, and the Swedish Insurance Federation representing the private fund companies were some of the most active in this endeavour (Riksfo¨rsa¨kringsverket 2003). Many of the private fund companies working with occupational schemes were reluctant to take part in the public–private partnership working through these issues and left the partnership in September 2002. The Swedish government felt that introducing the proposed new EM was important in order to fulfill the current objectives of pension reform by increasing trust through improved knowledge. The Ministry of Health and Social Affairs argued forcefully for using the EMs to get all actors to participate (Regeringsskansliet 2003). In December 2003 a network organization was created in the form of the public–private partnership My Pension in Sweden Ltd (Min Pension i Sverige AB) containing PPM, the Social Insurance Board and the Swedish Insurance Federation. This meant that a more limited version of the EM could be launched to the public in December 2004 to provide information from relevant agencies collected and made available after one week (www.minpension.se). Through the devices of this EM the individual citizen can make forecasts about his or her future pension benefits based on information about the value of the individual portfolio including the occupational scheme, preferred participation in the workforce as well as different assumptions about growth. In fact, the new EM was the only means of communication offering this information. An important ideal in the design has been simplicity in order to fit with the comparatively limited time people want to dedicate to issues like these (Lundström 2005). The main attempt to launch www.minpension.se was in the form of a special brochure describing its functionality and use. This was distributed as a ‘stowaway’ (citation from those involved) in the ‘The Orange Envelope’ that is sent out to all citizens every year. Also, www.ppm.nu, the portal of the Social insurance Board www.forsakringskassan.se and many private pension companies provide links to www.minpension.se.

In 2000 the premium pension system included 460 funds that by the year of 2005 increased to approximately 700 (SOU 2005). According to policymakers, the knowledge about risk and the awareness of different risk profiles among citizens was low, which led to a choice of funds that was not felt to be optimal. This led to an objective that was formulated to improve the quality of choice (SOU 2005). As expressed by an interviewee at the PPM: ‘During the first round of choosing funds an active choice was perceived as being important in itself. Later on it became clear that people didn’t know much about their choice, but despite this had made a choice.’ Also, during the first years of the new pension system many citizens made an active choice of funds whereas this became less the case during more recent years. The available devices were felt to be inadequate when it came to inspiring citizens to pursue an active and informed choice (SOU 2005). Since 2003, work had been going on at PPM to provide some kind of computerized decision support to improve the quality of choice of premium pension funds. A first version of this device was introduced in the spring of 2005 in the form of seven type portfolios with different risk levels. The introduction of decision support was further motivated by the Managing Director of the Financial Department at the PPM, Catrina Ingelstam:

Previously, the PPM has provided general guidance as regards how the clients might think about the choice of funds, but now we go a step further than this. The new form of support does not offer advice about the choice between individual funds, but suggests how to compose a portfolio of different funds. The clients ask for more advice (Premiepensionsmyndigheten 2005a: 1).

It was also reported that private companies started to offer advice about the choice of premium pension funds. In December 2005 a first online version of a further developed device, the Pilot (Latsen), was introduced on www.ppm.nu. In the spring 2006 the Pilot was launched.
on the main page of the EM of PPM by banner campaigns offering direct access to this new facility. It consists of a routine beginning with questions about peoples’ general willingness to engage in pension matters. If the user is unwilling to engage, he or she is led to two specific alternatives, one leading to a fund composed according to your age, the other leading to the ‘default fund.’ There is as an alternative for those who want to be active without any help from the computerized decision support facility. The Pilot itself starts with questions about the individual’s attitude towards risks in investments, as well as age and level of income. From the answers to these questions a portfolio composed of different types of funds is recommended. Thereafter, it is up to the individual to make an actual choice of funds between the alternatives available.

The need for a more advanced type of computerized decision support was recognized in several official reports (DS 2004; Finansdepartementet 2004). An official report on pension issues, ‘Difficult Waters? Premium Pension Savings on Course’ (SOU 2005), was launched in November 2005, emphasizing the complexity of the pension system and the difficulty in improving the level of knowledge among the general public. At the same time, it stressed the importance of improving the quality of choice and forcefully argued for the objective that PPM should expand its attempts to provide guidance through computerized decision support.

DISCUSSION

Using EMs in attempts to enrol citizens to public objectives

This study demonstrates that implementing EMs in pension reform includes many different types of action and negotiation that, from a larger perspective, aim at enrolment (Callon 1986) to certain public objectives. For example, during the course of the process a new legal framework was introduced (the new pension system) (Socialdepartementet 1998), a new public authority (PPM) was created, prominent civil servants took active part in the debate (Hedborg 1998; Regeringskansliet 2003), and an official report was published focusing on how to further develop the new pension system through the EM www.ppm.nu (SOU 2005).

But what can be said about the specific public objectives of pension reform and the technological devices available on the EMs in association with these? Table 1 summarizes the Swedish experiences of how the EMs appear as an important means in attempts to enrol citizens to different objectives that are related to their knowledge about different aspects of reform as well as aspired behaviour.

Based on these experiences, a general understanding of EMs can now be further developed. The devices on the EMs (see the right column of Table 1 and ‘Research Findings’) include the aggregation of information about the pension system, information about available funds, a more elaborated decision support, as well as facilities by which to carry out different kinds of transactions, etc. In a way, these devices are similar to the standard definitions of roles and devices of EMs (Bailey and Bakos 1997) that aim to support different phases in the interaction between buyers and sellers. For example, the EM of PPM provides information about available options, facilities by which to support the choice, as well as those used to finish a transaction. Despite the fact that the point made in this paper is to present a new way of using EMs that goes beyond the dominant paradigm of transactions, this latter facility is of great importance in circumstances like this. More particularly, devices supporting transactions are very important for completing the choice of premium pension funds (www.ppm.nu) as well as for obtaining information

Table 1. Objectives and EMs with associated devices in pension reform in Sweden

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>To provide services in line with the 24/7 ideal for self-service</td>
<td><a href="http://www.ppm.nu">www.ppm.nu</a> and <a href="http://www.minpension.se">www.minpension.se</a> as a whole</td>
</tr>
<tr>
<td>To accomplish an active choice of premium pension funds</td>
<td>Devices informing about options for choice and devices supporting transactions on <a href="http://www.ppm.nu">www.ppm.nu</a></td>
</tr>
<tr>
<td>To improve the knowledge about that all incomes earned during an individuals life affect future benefits</td>
<td>Devices informing about the pension system on <a href="http://www.ppm.nu">www.ppm.nu</a> as well as <a href="http://www.minpension.se">www.minpension.se</a> as a whole</td>
</tr>
<tr>
<td>To improve the knowledge about all sources of pension</td>
<td><a href="http://www.minpension.se">www.minpension.se</a> offering a view of benefits in the public pension scheme and the occupational scheme</td>
</tr>
<tr>
<td>To improve the quality of the individual's choice of premium pension funds</td>
<td>A specific device (The Pilot) on <a href="http://www.ppm.nu">www.ppm.nu</a></td>
</tr>
</tbody>
</table>

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The use of EMs can be contrasted with other types of policy instruments like legal sanctions, financial incentives and forms of communicative measures other than the Internet-based Web portals discussed in this paper. The main character of EMs is that they are multifaceted and flexible. Taking another key area of public services like taxation as an example, other types of instruments are used: legal sanctions (penalties in case the income tax return is not delivered in time), financial incentives (quick distribution of tax refunds) and various kinds of communicative measures (telephone help lines). These policy instruments are relevant for the comparatively simple administrative process of taxation of individual citizens.

Pension reform in Sweden is, like in other countries, based on creating closer connections between contributions and received benefits. Pension reforms are often controversial. A reformed pension system can be based on active choice of premium pension funds, as it is in this particular case. In such a situation, EMs can be seen as an enrolment device to the public objectives of an active or informed choice. Prominent actors might express the intention that EMs like www.minpension.se which are run by a public–private partnership should not only be dedicated to the ambition of increasing knowledge about all sources of benefits, but also very intentionally to promote the ambition of enrolling citizens to a public objective of increasing trust (Hedborg 1998) in this specific field of public policy implementation. Therefore, multifaceted policy instruments like EMs are essential in order to manage activities and serve in the attempts to enrol or connect citizens to the different mundane as well as more advanced objectives.

### Implications for citizens

In line with this, it is worth noticing that the experiences presented in this paper are not about using EMs in attempts to enrol citizens to any kind of public objectives. During the first years of reform in Sweden there was an ambition of promoting the idea of an active choice of premium pension funds through the EM of PPM. This was subsequently transformed into a more targeted ambition of improving the quality of choice. This ambition can be characterized as fairly advanced since it involves helping to make choices among hundreds of funds – an activity that is often far removed from the daily agenda of ordinary people. In fact, models of reasoning about the choice of funds is based on research into both economics and psychology (SOU 2005). Activities and ambitions like these are of such an advanced character that, it is argued here, even creating a comparatively low level of activity on the part of citizens is much more demanding than making people manage their banking affairs through Internet banking. Also, it has to be remembered that even seemingly passive citizens choosing the ‘default fund’ might do this against the background of informed choice. A further aim with the EMs and their respective devices is to make the individual citizen aware of the connections between his or her activities in the labour market and future pension benefits. Thus, the objectives and EMs with their respective devices in this study might be seen as a way...
of supporting the management of the individual’s life-goals by creating an awareness of financial activities and the consequences of the individual’s activities in the labour market. This is why pension reform and the associated existing EMs can be seen as part of a disciplinary agenda with the intention of creating a new type of citizen – one that is aware of his or her financial and professional activities with a life-long perspective: ‘The new citizen is required to engage in a ceaseless work of training and retraining, skilling and reskilling, enhancement of credentials and preparation for a life of incessant job seeking: Life is to become a continuous economic capitalisation of the self’ (Rose 1999: 161).

Therefore, this new and more encompassing way of using EMs in modern society is in itself an issue worthy of further reflections. After all, do we as citizens appreciate all dimensions of these attempts to make us manage our life-goals through EMs?

**FURTHER STUDIES**

ANT has informed the theoretical framework of this study especially through its concept of enrolment. ANT might, in general, be characterized as a process framework enabling a detailed account of the actions of humans and technology over the course of time. In this study, the process aspect has only partly been pursued in the analysis of objectives and associated technological devices. As mentioned earlier, the concept of enrolment is not only about the attempts to make others behave according to aspirations with the help of different technological devices, but also about whether these attempts actually succeed (Callon 1986). This is why future studies should delve into this aspect and thus examine the actual behaviour of citizens. For instance, what will be the result of the attempt to introduce a decision support for premium pension fund choice?

As previously concluded, this paper has shown how EMs with their respective devices feature as a part of public policy implementation explicitly targeted at citizens. With this as a background it is interesting to note further examples of this such as educational policy (Norén and Ranerup 2005). Another example is the Connexions card in the UK with the accompanying EM www.connexionscard.com which has the objective of making young people take part in education. In cases like these, the concept of enrolment might, it is argued here, deepen the understanding of the role of technological devices in the relationship between the state and its citizens, thus placing the activities on the larger agenda of public policy implementation.

Last but not least, a special feature of this particular kind of EMs is that they connect public and private actors in the capital market dedicated to pension funds. The more direct outcome of the technical devices might therefore be viewed as an important part of the formation of the market for premium pension fund capital. This is in line with a recent perspective on markets, which indicates the design of technologies in markets affects the actual conditions and rules in the market to a great extent (Callon 1998; Callon et al. 2002). Also, EMs like the ones studied in this paper might actively be used to increase the attention among the general public to pension issues, something that private pension funds might benefit from in future activities that attempt to reach new groups of customers. In fact, this has been on the agenda in the discourse in connection with the public–private partnership www.minpension.se (Lundström 2005).

**Note**

1. This way of rather liberally drawing from a theoretical framework is inspired by authors like Edwards (2002) as well as Knight and Noble (1997). More specifically, in this paper there is no analysis in which other related concepts in ANT (problematisation, interessement, enrolment, mobilisation etc) are used to track all aspects of the processes (Callon 1986). The hope is that the value of new insights extending the transactional paradigm will be greater than the loss in theoretical and analytical detail because of the chosen approach.

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