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**TOOLS FOR CONSUMER DEMOCRACY?
THE ROLE OF CYBERMEDIARIES
IN
QUASI-MARKETS**

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Abstract

Through their choice of for example education citizens are in a position to influence the production of public services, thus exercising 'consumer democracy' as outlined by Bellamy & Taylor. This article focuses on the framing of citizens as consumers in quasi-markets and the role of cybermediaries in this process, with special reference to the market for publicly financed education in Sweden. In this study four cybermediaries in the quasi-market for education in Sweden are examined. The most important research question concerns to what extent the processes of framing have resulted in cybermediaries that provide citizens with facilities to act as informed and calculative consumers. The result indicates that all cybermediaries contained information about available choices. Few had facilities for calculating agents' preferences as well as facilities for ranking alternative choices, and there were no facilities for describing actions to produce a preferred result. Several controversies were found concerning for example how the information should be provided, how to provide facilities for ranking, as well as what aspects that should be allowed to affect the design of facilities to calculate agents' preferences. This paper recognizes the controversial dimension of quasi-markets, but emphasizes the democratic value of cybermediaries to support consumers in their choice of services as appearing in this study.

Key Words: *Cybermediaries, Quasi-Markets, Internet, Citizens, Actor-Network Theory*

Introduction

During almost a decade the Internet has been introduced into the public sector with the aim of providing general information about public agencies and their services. To some extent the Internet has been used to provide citizens with opportunities to take part in democratic processes, and by thus influence the activities of the public agencies and the services they provide (“electronic democracy” or “digital democracy”) (Hacker & van Dijk 2000). One recent example is the technologies to support participatory democracy in the form of electronic petitioning as implemented by the Scottish Parliament in the late 1990’s (Macintosh et al. 2002). A further example is the on-line discussion forums appearing on Swedish local government websites (Ranerup 2001). These experiences can be discussed against a background of different democratic ideals. For example, there are differences between on the one hand proponents of strong democracy thus emphasizing the active participation in a dialogue between citizens and politicians, and on the other hand proponents of a less active electorate such as in the ideal of populist democracy. Despite these differences, both ideals have a common background in the form of the ideal of *representative democracy* (Bellamy & Taylor 1998; Hacker & van Dijk 2000).

However, there are alternative democratic ideals and ways of using information technology than those associated with the ideal of representative democracy. One such ideal is *consumer democracy* as proposed by Bellamy & Taylor (1998). According to this ideal, citizens should *not* be given the opportunity to influence the production of public services as *collective actors* in processes of representative democracy, but as *consumers* by means of their *collective choice* of public services (Bellamy & Taylor 1998). As compared to for example representative democracy, consumer democracy is restricted in two ways:

“In the first place, consumer democracy restricts citizenship to a notion of stakeholding in public services.... [It] establishes a claim to public information only in relation to the citizen’s stake in the delivery of public services. Second, the reliance within consumer democracy on the consumption nexus to interpret and moderate individual consumer preferences neglects the possibility that citizens might engage with others who may have equally powerful and rational preferences to express and that, as a consequence, individual choice might be moderated by political interactions.” (Bellamy & Taylor 1998, p. 99)

In this manner, neglecting collective forms of political engagement is partly compensated by a righteous claim to public information about available services. The concept of consumer democracy has a background in the 70’s and the renewal of the public sector, often referred to as ‘New Public Management’ (NPM), which dominated the reform agenda in many of the OECD group of countries. This new wave of public sector reforms emphasized the renewal of management and delivery of public services, as well as how these services are accessed and used (Bellamy & Taylor 1998). During the 80’s and 90’s the reform agenda changed into a drive

towards greater competition and the extensive use of contracts in public administration. One special feature of this process was the introduction of markets (often denominated 'quasi-markets') for public services like e.g. education, social services and healthcare. As described by two of the field's leading theorists:

"[Quasi-markets] are 'markets' because they replace monopolistic state providers with competitive independent ones. They are 'quasi' because they differ from conventional markets in a number of key ways. The differences are on both the supply and the demand sides. On the supply side, as with conventional markets, there is competition between productive enterprises or service suppliers. Thus [...] there are independent institutions (schools, universities, hospitals, residential homes, housing associations, private landlords) competing for customers. However, in contrast to conventional markets, all these organizations are not necessarily out to maximize their profits; nor are they necessarily privately owned. [...]. On the demand side, consumer purchasing power is not expressed in money terms in a quasi-market. Instead either it takes the form of an earmarked budget or 'voucher' confined to the purchase of a specific service allocated to users, or it is centralized in a single state purchasing agency". (Le Grand & Bartlett 1993, p. 10)

The introduction of quasi-markets can be found in several countries, like for example in the UK (Bellamy & Taylor 1998; Ferlie et al. 1996) as well as in Sweden (Norén 2001). As indicated above, quasi-markets give citizens in their role as *consumers* of public services the opportunity to *affect* the production of public services by means of their choice of services. Perhaps not surprisingly, giving citizens a more direct opportunity to affect the production of public services by means of their choice as a contrast to the more traditional forms of influence in representative democracy has sometimes been perceived as controversial (Bellamy & Taylor 1998). One of the more obvious reasons is that representative democracy in its current form is to some extent bypassed.

Furthermore, the realization of the concept of consumer democracy in itself is not unproblematic, as it is heavily dependent on information about citizens' preferences:

"In principle, consumer democracy rests upon two different types of information flows, one type generated *by* 'citizens' as explicit and intended expressions of popular voice, by participation in public forums or through market research techniques, for example. However, [...] the informatization of public services also liberates increasingly rich information *about* individuals' preferences, information which is capable of being exploited to shape or legitimate public policy. If we take seriously the doctrine of classical economics, that markets are the most effective way of signalling preferences, then data generated by the informatization of marketized relationships will be an increasingly significant source of 'democratic' intelligence." (Bellamy & Taylor 1998, p. 92)

However, as regards the issue of providing citizens with the opportunity to affect the production of public services by means of their choice this article takes a different point of departure. Instead of investigating various forms of information technology that might provide information *by* citizens and their views as well as *about* citizens and their choice of services as described above, the present study will examine attempts to construct information technology aimed at *citizens* in various states of *choice* of public services. There are two main arguments behind this specific focus.

First, to construct information systems with the particular needs of citizens in mind rather than the internal needs of public agencies is a complex and demanding task. For historical as well as practical reasons the later alternative has predominated (Bellamy & Taylor 1998). For example, concerning the type of information system that contain data *by* citizens and their preferences, as well as information *about* their choice as

suggested by Bellamy & Taylor above, the internal information needs of the public agency have been prioritized until recently:

“Whereas, until the early 1990s, governments were mostly concerned with protecting their abundant stores of information, they are now much more concerned with the liberation from government organizations of consumption-related data, in order to stimulate managerial efficiency and consumer choice. If the key political object of NPM was to effect an irreversible shift from producer-dominated to consumer-oriented public services, then securing greater symmetry of information between producers and consumers has come to be seen as crucial to its realization.” (Bellamy & Taylor 1998, p. 101)

As a consequence, the important precondition for the realization of consumer democracy in the form of information with relevance to consumers and their needs has not been well catered for. In spite of this, during the last few years by means of using the Internet as an infrastructure a new type of information systems has been developed with the intention of supporting citizens in their *choice* of public services. In the following it is argued that this development is of interest in a discussion about information systems to support the ideal of consumer democracy. In other words, it is here argued that this type of information systems supports as well as enhances the idea that citizens should affect the *production* of public services by means of their *choice* of services. Put simply, in a situation where citizens as consumers are allowed to determine the production of services by their choice of services, then ideally this very choice of services should rather be more informed and calculative than less so. As such, this type of information systems is considered to be in line with the ideal of consumer democracy. Naturally, as a complement to this type of information systems the preferences and actual choices made by citizens must be taken care of in the way suggested by Bellamy & Taylor. Also, it must be allowed to influence the production of public services. What is described and discussed in this study is a type of *supplementary* information systems with the intention to support citizens as consumers in their choice of services.

Providing citizens with advanced information systems requires that a multitude of actors are involved in the production of the requested information, as well as the existence of highly developed organizational infrastructures (Grönlund et al. 2000). Consequently, the first contribution will be to provide some recent examples of information systems that to a certain extent are designed with the aim of *citizens* when being in a position of *choosing* between various forms of public services most of which are produced in quasi-markets. As thus this article will also contribute to the discussion of information systems to support consumers as opposed to public agencies, something that is of relevance to the ideal of consumer democracy (Bellamy & Taylor 1998).

Second, this study of information systems to support citizens as consumers will use the quasi-market for publicly financed education in Sweden as its field of reference. The introduction of quasi-markets means that citizens (at least in theory) are transformed into consumers of education. As indicated above it is here argued that an important precondition for this is that citizens have access to information and other facilities to be in a position to make an *informed and calculative choice*. With this as a background it is interesting to notice how the research field of electronic commerce describes cybermediaries (i.e. information systems functioning as an intermediary between producers and consumers) and their roles:

“Cybermediaries are organizations that operate in electronic markets to facilitate the exchanges between producers and consumers by meeting the needs of both producers and consumers.” (Sarkar et al. 1998)

It is here argued that the information systems that will be in focus in this study might be characterized as cybermediaries of a special kind with the special intention to support citizens in their choice of public services.

The cybermediaries in commercial markets contain certain facilities and pursue different roles in business processes. One example is a discussion about various potential roles of cybermediaries as appearing in Bailey & Bakos (1997). For example, according to their analysis of cybermediaries four prominent roles are detected: (1) supporting the aggregation of information, (2) creating trust, (3) facilitating business process and (4) matching clients and customers. A further example is the analysis made by Timmers (2000) focusing on differences in degree of innovation and functional integration in cybermediaries in commercial markets.

However, as a contrast there exists almost no research on cybermediaries in quasi-markets, with a few exceptions. Ballantine & Cunningham (1999) treat how cybermediaries are used in UK healthcare as a consequence of a marketisation reform that separated service purchasers from service providers. Here the focus is on the internal information needs within healthcare, as a contrast to the information needs of citizens as consumers of healthcare. Of greater relevance to this research is a study of cybermediaries in quasi-markets for education in Sweden (Norén 2001). The study of Norén contains a broad discussion about the information needs of citizens when seen as consumers of education, with a special focus on general information and quantitative evaluations. As a consequence, the approach in the present study will provide further experiences of cybermediaries with a focus on the design of cybermediaries for citizens in quasi-markets.

More importantly, this study has been theoretically inspired by Actor-network theory and the concept of framing of markets and calculative consumers (Callon 1998). Therefore, the second contribution will be in the form of applying some selected aspects this theoretical framework on a comparative study of cybermediaries in quasi-markets. In other words, it is here argued that this framework outlines essential features of infrastructures in markets that are of relevance for citizens as consumers. This makes the model of Callon more appropriate as a framework for the present study compared to, for example, the framework as suggested by Bailey & Bakos (1997) and Timmers (2000). Instead, both these frameworks emphasize the features of the cybermediaries from a far too *general* and *imprecise functional* as well as *technical* point of view rather from the point of view of the needs of users as seen as *consumers*.

In this article it is also argued that that the model of Callon is of special interest here because of the specific nature of quasi-markets in general as well as cybermediaries to support consumers in particular. Both phenomena are created or constructed when it comes to their features and functions. As thus, it is of relevance to discuss phenomena like these in terms of concepts like *framing*, thus emphasizing their *constructive* nature.

In summary, the most important research question concerns to what extent the processes of framing have resulted in cybermediaries that provide citizens with facilities and functions in order to act as informed and calculative consumers. As indicated above, the process of introducing information systems in the form of

cybermediaries to support citizens in their choice of services has just begun. Therefore, this article will also treat the problems and controversies that prevail when cybermediaries in quasi-markets are constructed and introduced.

The article will now be continued with a brief description of the theoretical framework of this study in the form of Actor-network theory. Then the research method will be described; a comparative case study of four cybermediaries and their respective qualities. After follows an examination of cybermediaries and their roles in the framing of citizens as consumers. The article will be continued by a discussion of the controversies that prevail during the processes of framing as well as the role of cybermediaries as tools for consumer democracy. In closing there will be some conclusions from the present study as a whole.

Theoretical Framework

Actor-network theory (ANT) emerged during the second half of the 80's (Callon 1986; Law 1986 and others) and has continuously been developed since then (Law & Hassard 1999). In practice this means that ANT contains several complexities and concepts. However, put simply, ANT emphasizes the role of both humans and technology in the discussion about how society and technology evolves. As a contrast, the perspective of Social Construction of Technology (SCOT) (Pinch & Bijker 1987) emphasizes the role of humans as determining the roles and effects of technology. Instead, in terms of ANT, society at large and various phenomena like markets, information systems, and larger infrastructures like the Internet, evolve through a process in which different actors (humans as well as technical actors) with their respective interest aligns to each other into actor-networks. The various actors pursue their own interests, which they try to translate into social and technical arrangements ('inscriptions') through this process of alignment. Sometimes this process of alignment proceeds to a point at which one translation of interest starts to dominate and the process becomes irreversible (Callon 1991).

First and foremost, the following discussion will treat a specific feature of this theory in the form of the concept of *framing* or construction of *informed and rational consumers* ('calculative agents') as pictured by Callon (1998) as opposed to the view that consumers appear as an a-historical reality. This perspective serves as a basis for reflections on the role of cybermediaries in this process of framing and their potential to support citizens as consumers of public services. Also, it serves as a basis for reflections on the role of cybermediaries as tools for consumer democracy.

As pointed out by Hanseth (1996), it is a demanding and time-consuming task to follow the development of ANT in itself. Above it was argued that using the concept of framing of markets and calculative agents is appropriate in a discussion of cybermediaries to support consumers in quasi-markets (Callon 1998). In practice this means that the author, like Hanseth, intends to apply a kind of ANT "light" in which a limited aspect of this theory (the framing of markets and calculative agents) and the role of cybermediaries in this process is employed.

Callon (1998) discusses the existence of markets and the creation of calculative agents or consumers:

"Under what conditions is calculativeness possible? Under what conditions do calculative agents emerge? ... More specifically, for calculative agents to be able to make decisions they

need at the least to be able to: i) establish a list of the possible states of the world (each state of the world being defined by a certain list of actors and goods, and by certain distribution of these goods amongst the actors); ii) rank these states of the world (which gives a content and an object to the agent's preferences); iii) identify and describe the actions which allow for the production of each of the possible states of the world." (Callon 1998, p. 4)

As thus the calculative agent:

"[...] will not only be able to get an idea of possible goals and rank them, but also mobilize the resources required to attain them." (Callon 1998, p. 4)

For this to happen a process of *framing* must take place in which the un-coordinated transactions and relations between actors are transformed into a space of calculability with the above-mentioned characteristics. This means that in this process of framing various forms of equipment and devices are introduced. In the example described by Callon (the creation of a strawberry market) the provision of a warehouse, facilities to support the display of the strawberries, and a catalogue of information meant that the actors concerned (sellers and buyers) had precise knowledge of the supply in terms of quality and quantity. Thus, as described earlier both markets as well as informed and calculative consumers might exist in certain situations, but are not an a-historical reality:

"The conclusion that can be drawn from it is extremely simple yet fundamental: yes, *homo economicus* does exist, but is not an a-historical reality; he does not describe the hidden nature of the human being. He is the result of a process of configuration, and the history of the strawberry market shows how this framing takes place."
(Callon 1998, p. 22).

Callons' preconditions for calculativeness and the framing of consumers will here be transformed into four features or qualities that the cybermediaries might contain. The appearance of these features will be taken as a basis for discussing to which extent cybermediaries in the quasi-market for education in Sweden enhances the potential of citizens to act as an informed and calculative consumer. The process of framing of consumers by means of constructing cybermediaries in quasi-markets is longitudinal and might, or might not, come to a state of irreversibility and stabilization at some point of time. What is studied here is the result of this process with an emphasis in *a particular period of time* (Spring 2002), and its consequences for citizens as consumers. These issues will also be treated in the section on "Method" as well as in the concluding discussion.

Inspired by the model of Callon (1998) and the framing of markets and calculative agents, the cybermediaries might contain four types of features or functions as a matter of necessity:

- Facilities for providing information about the market and alternative choices
- Facilities for calculating agents' preferences
- Facilities for ranking alternative choices
- Facilities for describing actions and resources needed to produce the preferred result

The actual meaning of respective feature will be further developed in connection with the case study further down.

Method

As a starting point this article uses a comparative case study of four cybermediaries in the quasi-market for education in Sweden:

- www.infoteket.se is a website for careers guidance that is owned by the municipality of Göteborg and the local division of The National Labor Market Board in Sweden (“Länsarbetsnämnden”).
- www.indranet.nu is a website for information about schools aimed at students between 16-19 years that is owned by 13 municipalities in the west of Sweden.
- Siris on www.skolverket.se is a website for information and statistics emanating from all schools in Sweden aimed at students between 7-19 years of age. It is owned by The Swedish Board of Education (“Skolverket”).
- www.ams.se is a website aimed at issues with relevance to job seeking, education and recruiting owned by The National Labor Market Board in Sweden (“Arbetsmarknadsstyrelsen”).

All four websites contain information about the quasi-market for education and are owned by public agencies. Moreover, they contain a variety of functions and features for maximum variation between the cases. Lastly, all websites can be characterized as innovative in one respect or another.

Fourteen interviews have been carried out with people who have been involved in the design and management process of the cybermediaries. The interviewees are seen as to represent the owners and the designers of respective website. The interviews took place between September 2001 and February 2002. The cybermediaries have also been examined through direct inspection with a special focus on their functionality.

Apart from this, a closer examination of the behavior and roles of citizens or consumers in these processes of framing might also have been relevant. For practical reasons this has not been a part of the research approach as applied here. Other groups of actors are also involved in these processes, for example in the form of guidance practitioners that are working with various types of counseling about educational issues. This more limited approach is considered to serve as an initial phase of an examination of the role of cybermediaries in quasi-markets.

ANT can be applied at various levels of actor-network processes. As an example, Knights & Noble (1997) employ it to describe a broad range of phenomena grouped under the headline “home banking.” Telephone banking, PC banking, and Interactive tv-banking are all seen as features of the alignment process that constitutes the phenomenon ‘home banking’. They describe this as a broad-brush approach, and adheres that each one of these processes in their own right deserves to be analyzed in detail. In this article the processes in association with the various cybermediaries are studied separately, that at an aggregated level is taken to represent the broader phenomenon of cybermediaries in quasi-markets. The approach of this study is limited in two respects: 1) by concentrating the discussion in time, with the main emphasis on the “state of the art” of the processes of framing during the spring of 2002, and 2) by to a large extent ignoring other actors than the cybermediaries and their designers and owners as described above.

Cybermediaries in Quasi-Markets: The Market for Education in Sweden **www.infoteket.se**

Background: www.infoteket.se (henceforth referred to as ‘infoteket’) has a history that dates back to the pre-Internet era (1992). In this year an innovative local center for educational and careers guidance was started in the city of Göteborg, Sweden.

Career guidance practitioners working as designers of information technology were in charge of the new center. They had a special interest in moving information about education and careers issues closer to clients as opposed to professional guidance practitioners. One way to accomplish this was to provide clients with access to databases that contain information about these issues in a particular open space for careers guidance. A main intention with the activities was to find new methods for meeting the increased need for guidance, at the same time as providing personal guidance when necessary. During this period of time these activities were financed by the municipality of Göteborg and the local division of The National Labor Market Board in Sweden (“Länsarbetsnämnden”).

The attitude towards information technology was very positive among the guidance practitioners/designers, and very early they came into contact with visions of the potential of Internet. As a result a rather primitive website was launched in 1994 with information about educational and careers issues. This meant that *infoteket* became a virtual as well as a physical place for guidance. At that time, the initiative can be characterized as a unique way of using the Internet to inform about educational as well as careers issues. The western region of Sweden is prioritized as a target area and a source of information, but there is also information with a national as well as international focus. It was felt that *infoteket* should be used as a tool to gather information about educational and careers issues, but also as a tool to reflect on ones personal preferences in this respect. According to the designers it is important that *infoteket* should be used as an *independent* tool for careers guidance with a focus on the west of Sweden. During the second half of the 90's similar initiatives were taken in other Swedish regions, but *infoteket* has been developed continuously and it has kept its leading role. Also, during 1999-2000 the designers working with *infoteket* initiated a project financed by the National Labor Market Board with the aim to introduce a facility for careers guidance in the sense of facilities for calculating and reflecting about ones own preferences, that should be added to the website www.ams.se. The result of this project was less successful (see below in this section).

However, in the year of 2000 the ownership of *infoteket* in Göteborg was questioned. The physical center for careers guidance was closed down in its previous form and was taken over by the municipality of Göteborg. The virtual *infoteket* was provided with means for its further existence from the same sources as before, which meant that the information it contains would be maintained, and the facilities for careers guidance would be developed further. Also, during the last two years the designers have been involved in projects with the intention to cooperate with other websites with a similar focus on educational issues and careers issues. One example is the suggested cooperation with the website www.indranet.nu (see below in this section) thus contributing with its special features for educational and careers guidance through the Internet.

Facilities for Providing Information about the Market and Alternative Choices:

Infoteket contains a rich structure of information, mostly in the form of links to other websites. The categories of information are as follows: Labor market, Business sectors, Careers guidance, Wage statistics, How to start your own business, How to finance your studies, Information on education, International focus, and the West-region focus. There is also an independent production of news with relevance for educational and careers guidance.

Facilities for Calculating Agents' Preferences: The vast majority of *infoteket* is dedicated to a well-arranged structure of information about educational issues and information about the labor market at large as previously described. However, there is a clear ambition to provide something more; i.e. that *infoteket* should support the decision-process and the *personal* reflections on the options that are available. In practice, this means that a whole section of the *infoteket* is dedicated to facilities like e.g. tests that are focusing on levels of knowledge and personal interests etc, links to websites where human guidance practitioners might be contacted, and links to commercial companies working with careers guidance etc. Also, designers are continuously working to further develop these facilities. It is also interesting to note the intention to use theories from the field of careers guidance in this work (Watts 1996). Lastly, among the designers there were diverging views as regards this facility: should it be simple and relevant to all types of users, or should it be differentiated according to the specific characteristics of different user groups in terms of age, previous education?

Facilities for Ranking Alternative Choices: *Infoteket* contains no facilities for ranking alternative forms of for example education as a basis for a choice.

Facilities for Describing Actions to Produce the Preferred Result: As described earlier, *infoteket* contains many categories of information. However, during the main period of study there was no facility with a holistic or long-term perspective. This kind of facility might be used for describing actions and resources needed to produce the preferred result when it comes to e.g. pursuing a certain study path with the intention of qualifying for a certain profession.

www.indranet.nu

Background: A majority of the students in Sweden continue their studies between 16-19 years of age. The students are in a position to choose from a variety of theoretically as well as practically oriented programs, some of which can be found in their own municipality or in another municipality in the region. In the region of Göteborg approximately 25 percent of the students choose a program in another municipality than their own, but there are also various options to choose from within ones own municipality as well. In 1995 a discussion among 13 municipalities took place in the region featuring how computers could improve the application process as well as provide information about the process. As a result from this discussion a computerized information system ("Indra") was constructed and implemented with the help of a designer appointed by the 13 municipalities in collaboration. This system was aimed at career guidance practitioners that handled the application process and provided information about various educational options. As a next step, the career guidance practitioners should pass this information over to the prospective students. The system also gave a statistical view of the application process and its results,

meaning that the headmasters at the different schools were seen as a further group of users.

However, the Internet was more and more seen as a means to provide some of these resources directly to the students and their parents. The designer supported this very idea and managed to get some financial support by the municipalities in conjunction to pursue it. In the autumn of 2001 a website www.indranet.nu (henceforth referred to as '*indranet*') was ready to be used in the application process preparing for educational programs beginning in the autumn of 2002. According to its designer *indranet* was directed towards students as well as parents.

Facilities for Providing Information about the Market and Alternative Choices:

Indranet provides information about different programs and types of schools, as well as in which municipality they can be found. Some of the information is neutral in character (where to find a program), but there are links to the schools providing information of a more local and personalized character as well. *Indranet* also contains information about the application process, a FAQ, and news that is of relevance to this process. Of special interest is the separate website www.gymnasieval.nu that was launched in the city of Göteborg, leading to *indranet*. This was done through an advertising campaign in connection with the application process in the winter of 2001-2002. The separate website contained information with the purpose of marketing schools situated in the city of Göteborg that are run by the municipality itself, as a contrast to schools that are run by other agencies.¹

Facilities for Calculating Agents' Preferences: *Indranet* contains no facilities for calculating agents' preferences like e.g. tests that are focusing on levels of knowledge and personal interests etc. However, in March 2002 there was a proposal from the authority in the city of Göteborg working with educational issues. It suggested that the facilities for careers guidance in *indranet* should be developed further. The final political decision in this respect has not been taken as yet. More specifically, it is suggested that the facilities for educational information and careers guidance as provided by the *infoteket* should be tailored to the particular needs of students between 13-19 years of age (Backlund & Asplund, 2002). Also, it is suggested that these facilities should be incorporated into the *indranet*.

Facilities for Ranking Alternative Choices: *Indranet* contains no facilities for ranking e.g. different programs or different schools as a basis for a decision.

¹ Despite these differences, in Sweden all schools at this level are financed by public and not private means, and the students are in a position to choose which one to attend.

Facilities for Describing Actions to Produce the Preferred Result: One can find information about actions to produce the preferred result in one type of process; e.g. in the application process itself as supported by *indranet*. Also, the application process could be carried out by means of using *indranet* and the application forms that it provides. However, at present *indranet* contains no information describing actions to produce the preferred result when it comes to e.g. pursuing a certain study path with the intention to qualify for a certain profession. In this respect, there is no facility with a holistic or long-term perspective.

Siris at www.skolverket.se

Background: During the 90's the Swedish system for compulsory education for students between 7-19 years of age has undergone several types of changes. One type of change is represented by the introduction of quasi-markets as described in the beginning of this article. As a consequence, students and their parents have, much more than previously, the right to choose among the various schools that are available. Often this right is limited to their own municipality and what it has to offer. When it comes to schools and programs aimed at students between 16-19 years of age the right goes further than this, as described above. Another type of change is that management by objectives has been introduced in the school system as a contrast to management by rules and regulations. A further goal of the Swedish system is that the education provided should be of equal quality in schools that are run by local authorities as well as schools that are run by other agencies. This makes it more important to closely follow the activities in the Swedish schools in the form of grading, costs, staffing etc. The Swedish Board of Education ("Skolverket") is in the center of this process, thus receiving the bulk of information on these issues from the 289 Swedish municipalities.

In the pre-Internet era this information was received on paper, and was made publicly available through reports, some of which were requested by e.g. professionals working with educational issues. In 1997 official proposals highlighted the value of finding new ways of improving the access to this information and Skolverket itself initiated a discussion on this issue. The Swedish Association of Local Authorities ("Kommunförbundet"), the teachers' unions, and the students' unions took part in this discussion. As a result of the discussion the Internet was defined as a tool for, on the one hand connecting the various types of information and on the other hand making them accessible to a larger audience. In 1999 the work started with Skolverket as the owner and designer of the coming facilities for information about the activities in the Swedish schools. In the autumn of 2001 *siris* and *salsa* were introduced as special features on their own website www.skolverket.se. The new facilities gave on-line access to various reports and statistics about the activities in the educational system in Sweden that were previously presented on paper. They also included various facilities to manipulate the statistical data that were not previously available.

Facilities for Providing Information about the Market and Alternative Choices:

There are two kinds of reports that can be found in *siris*: reports focusing on quality issues in the schools, with information from every municipality in Sweden. There are also reports on certain selected issues, such as the support provided to pupils with special needs etc. Apart from these reports there are several categories of statistics covering various aspects of the quality of the educational system with a focus on schools for students from 7-15 and 16-19 years of age respectively (see below).

According to its designers and owners *siris* is a source of reports and statistics on different aspects in connection with the quality of the schools in Sweden that should be used for reflecting on the activities in the schools of today. The teachers, headmasters etc are the primary target group, but the parents and the students themselves might also use *siris* as a resource.

Facilities for Calculating Agents' Preferences: *Siris* contains no facilities for calculating agents' preferences like e.g. tests that are focusing on levels of knowledge or personal interests etc as a basis for the choice of a school.

Facilities for Ranking Alternative Choices: *Siris* also contains a database with statistics focusing on the costs of schooling, the staffing, but also the grading in the schools. It is possible to compare one specific school with other schools, or to compare schools in one municipality with other municipalities etc according to ones own choice. The meaning of different concepts and figures that appear is explained thoroughly. There is an even more sophisticated database; *salsa*, containing functions to manipulate the data. Here it is possible to experiment with the effects of social background factors such as different levels of students with foreign origins and the educational level of parents etc. It could also be used as a basis for comparing different schools with each other, but should *not* according to its owners and designers be used as a tool for producing ranking lists. According to instructions made by its designers *salsa* is aimed at professional users.

Facilities for Describing Actions to Produce the Preferred Result: As mentioned above, *siris* contains many categories of information including statistics of various types. The users (professionals as well as parents and students) are encouraged to use the information for reflections about the activities in the schools. However, apart from this there is no facility with a more individual perspective or long-term and holistic perspective on the choice of education.

www.ams.se

Background: The National Labor Market Board in Sweden administers various programs and benefits directed towards people who are unemployed, people with a low level of education and people who want to change their careers from one occupation to another etc. It is also responsible for the jobcentres that can be found in every municipality in Sweden. During the 80's there was an increased use of computers in these activities. For example, a large register that contains all vacant employment positions was kept. As a consequence, at that time this register could be stored in a database that might be accessed through their own computer-network. In the beginning of the Internet era (1995-1996) there was a negative, or almost prohibitive, attitude towards using the Internet within the agency as such. During the last few years this attitude has changed into its opposite. www.ams.se was launched in 1998 with a main focus on the database of vacant positions described above. In 1999 the Internet and the website www.ams.se (henceforth referred to as '*ams*') was characterized as the main point of contact between the agency and its clients. This meant that self-service should be the normal alternative, whereas personal service should be considered as an exception. It was seen as a way of meeting the increased need for service and information that is the result of higher unemployment rates. Another feature of post-modern society is a desire to reconsider ones career and professional competence during the span of a working-life.

Apart from the various categories of information about education as described below, *ams* contains a 'virtual labor market' in which the jobseekers as well as the employers have their own functions according to their specific needs. New functions are introduced continuously, for example in the form of providing the options to register your own CV as a jobseeker. At the jobcentres that are run by the National Labor Market Board, *ams* is presented to jobseekers as a tool that should be used as the main point of contact as well as a resource in itself.

During 1999-2000 The National Labor Market Board financed a project initiated by career guidance practitioners that were working with *infoteket* (see above). The aim of this project was to further develop facilities for educational and careers guidance through the Internet. The prototype that came as result of this project was considered to be too complex in user tests, and its suggested layout as not being in line with *ams*. As a consequence, the prototype was not included as a feature of *ams*. The project as such resulted in valuable experiences of educational and careers guidance through the Internet.

Facilities for Providing Information about the Market and Alternative Choices:

Ams is described as the most popular website in Sweden dedicated to job seeking and recruiting. Apart from the 'virtual labor market' directed towards jobseekers as well as companies with the intention to recruit as described above, there is also links to the different jobcentres in Sweden. However, on *ams* there is a category 'Occupations and studies' that contains information about educational issues. One example is a database containing short texts describing educational programs at all possible levels, including those at an academic level. There is also a structured list of links to other websites that present information about different educational programs, schools and universities etc. It is emphasized that for the user it must be clear that The National Labor Market Board is the owner of *ams* as well as the owner of information if appearing on other websites.

Facilities for Calculating Agents' Preferences: The facilities that exist during the spring of 2002 are limited to primitive knowledge tests and personal interests tests. However, as regards the appearance of facilities for calculating agents' preferences, there is a clear ambition that *ams* should provide something more than today. One example is the project with the intention to develop facilities for careers guidance, or more particularly for calculating and reflecting about ones own preferences, which was run in 1999-2000 in cooperation with the designers from infoteket. Also, The National Labor Market Board itself has developed a prototype with a focus on broader perspective on careers guidance during the autumn of 2001. It contains various facilities like e.g. sophisticated personal interests test, facilities for reflecting on the willingness to move or to borrow money to finance ones studies, as well as forecasts about the future of different occupations and professions etc. Practical experiences of careers advisors are taken as a basis for the design. For this facility to be used in practice the user must be in a position to save his/hers activities for an extended period of time. This problem has not been solved technically, but will probably be solved in the autumn of 2002.

Facilities for Ranking Alternative Choices: *Ams* contains no facilities for ranking alternative choices of for example education as a basis for a decision.

Facilities for Describing Actions to Produce the Preferred Result: As described above, *ams* contains information about schools and educational programs, including information about how to finance your studies. On the other hand, there is no facility that might be used from a holistic or long-term perspective. This kind of facility might be used to describe actions to produce the preferred result when it comes to e.g. pursuing a certain study path with the intention to qualify for a certain profession. However, as indicated above, work is going on with the intention to produce a tool for careers guidance. It is also interesting to notice that the introduction of a facility to be used from a long-term perspective is partly a technical problem as indicated above.

Discussion

Cybermediaries as Tools for Consumers in Quasi-Markets

The processes of framing of all cybermediaries in the present study have resulted in facilities that provide information about available services, albeit with some differences as regards their specific characteristics and focus. The *infoteket* and *ams* contain information on a broad spectrum of educational activities in the form of shorter texts produced by their designers as well as links to other websites. *Indranet* has a similar construction, but with a much more limited focus on education directed towards students between 16-19 years of age in the western region of Sweden. *Siris* contains statistics as well as qualitative reports with a focus on education for students between 7-15 and 16-19 years respectively. Despite these differences, in the processes of framing providing information seems to have been a *natural* and *to some extent uncontroversial* feature of the cybermediaries. Moreover, as expressed by their designers and owners the cybermediaries should be used as a source of information about educational and careers issues. This emphasizes their role as a source of information.

However, in these processes of framing the author has found several *controversies* regarding how this information should be provided. In Sweden there are various

forms of publicly financed education and careers guidance within the educational system. In an official report (SOU 2001) the forms of careers guidance that exists in Sweden today are discussed. The report argues that the need for educational and careers guidance is growing due to the necessity to reconsider ones career several times during a working-life. As a consequence, the report suggests that new methods for providing careers guidance should be introduced in the form of e.g. using the Internet in new and innovative ways. It also contains a review of various websites that provide information about educational issues, most of which are owned public agencies. This situation causes unnecessary work among the owners of the websites as well as confusion among citizens or users it is argued. Therefore it is suggested that a national website should be introduced that covers all aspects of information and guidance on educational and careers issues.

According to the interviews with the designers, before this project of introducing a national website even have started several large public agencies have begun to cooperate in regard to information about educational issues. Among these are two of the owners of the cybermediaries in the study: The National Labor Market Board of Sweden and The Swedish Board of Education. However, in this process of constructing a national website some aspects have been perceived as controversial. One controversial aspect is the value of a national website as a cooperative activity versus the cost and size of such a project. Some actors consider the cooperation as being uncontroversial and recommendable, whereas others feel that it is expensive and complex to create a national website. Other actors support the value of cooperation but, as indicated previously, emphasize that the origins and ownership of information that they produce must be clear to the user. Here an interest among actors can be detected in being *visible* as a producer of information on specific issues as a contrast to a will to *cooperate* as producers of information.

The introduction of the separate website www.gymnasieval.nu describing the schools in Göteborg that are run by the municipality as a contrast to other agencies indicates a further issue of controversy regarding the information provided. The information about the schools might be characterized as more *neutral* in character, as well as a means to *market* the different schools. Also, a proposition from the authority in the city of Göteborg working with educational issues as referred above emphasized the need to differentiate between more neutral information as well as information with the intention to market certain schools (Backlund & Asplund 2002). Interestingly, the distinction between more neutral information, as a contrast to information with the intention to market certain schools, has been pointed out in previous research into careers guidance by means of telephone helplines, as for example in connection with the UK helpline *Learndirect* (Watts & Dent 2002). The issue as such is even more complex when the owner of the telephone helpline or the website itself is a provider of education. This is for example the case concerning *ams*, *indranet*, as well as *Learndirect*. In sum, despite the uncontroversial nature of using cybermediaries to provide information *per se* there is one type of controversies concerning *how this information should be provided*.

As regards the facilities for calculating agents' preferences no significant such facility is present in the study, except in connection with *infoteket*. However, actors like the owners and designers of *indranet* and *ams* seem to argue for the value of such a facility, and it should be noticed that several of the designers in this study were

involved in activities with the aim of introducing one. In association with *infoteket* there is a view that the basis for design should be in the form of theories from the field of careers guidance (Watts 1996), whereas the designers of *ams* define the experiences of guidance practitioners when meeting clients as a basis for the design. There are further controversies as regards the definitions of the users and how user characteristics should be allowed to influence the design of facilities for calculating agents' preferences. For example, should the facility be simple and relevant to all types of users, or should it be differentiated according to the specific characteristics of different user groups in terms of age, previous education etc? Consequently, there seems to be another type of controversies concerning the *aspects* that should be allowed to *affect the design of the facilities to calculate agents' preferences*.

As to the facilities for ranking alternative choices of education, *siris* on www.skolverket.se provides a rich statistical material that might be used for this purpose. The other three websites have no facilities of this kind. It is worth noticing that the existence of statistics as in this case is dependent on a common evaluation of various alternatives. Two of the cybermediaries (*infoteket* and *ams*) contain information on education at various levels and can hardly provide a common evaluation of all of these. Also, there was no discussion of this issue in association with them. However, in connection with *indranet* due to its limited scope providing a common evaluation might be feasible in future for practical as well as organizational reasons. Even so, the issue of providing facilities for ranking is associated with serious controversies as appearing in this study.

Despite the fact that the statistical material for ranking schools in *siris* on www.skolverket.se can be characterized as rich, according to the owners and designers they represent a simplified description of the schools. The statistical material is considered as an appropriate basis for discussions about the activities in the schools of today. The fact that ranking lists were produced and published in the newspapers in connection with the activities when *siris* was launched was defined as less appropriate. More than so, it was defined as the *wrong* way of using this facility. Instead, when used in a more balanced way the statistical data can be of great value it was argued. Interestingly, other experiences support the controversial nature of using statistics for producing ranking lists. The website of the municipality of Göteborg (www.goteborg.se) contains results from balanced scorecard-data emanating from schools in this municipality. Also here the statistics seems to have been used for producing ranking lists that were published in the press. The owner of the website considered this as a less appropriate use of the statistics (Norén 2001). In sum, there seems to be a further type of controversies in connection with the *circumstances during which the facilities for ranking are provided and used*.

As regards the facilities for describing actions to produce the preferred result from a long-term, holistic perspective; no such facilities were found in this study. In some respect the facilities for careers guidance on *infoteket* might be characterized as one, but not in their present form. The designers and owners of *ams* are working to provide a facility supporting a long-term perspective on e.g. education and careers issues, but have not succeeded yet. Also, the issue of providing facilities for describing actions and resources needed to produce the preferred result seems to be less controversial than perhaps might be expected. As becomes clear against the background of the experiences from *ams*, this is partly a *technical issue*. In order to use this website from

a long-term perspective the citizens must be provided with a facility to save their activities (documents, CV, personal tests etc). There is no doubt that this will be possible in the near future, and that concrete plans to effectuate this exist at, for example, *ams*. However, this being said, it must be emphasized that it is a totally different matter to what extent the citizens will align to the facility and as such *use* it, and that the construction and introduction of cybermediaries to support informed and calculative consumers in this respect might be considered as successful.

Cybermediaries as Tools for ‘Consumer Democracy?’

According to the concept of consumer democracy citizens should affect the production of public services by means of their collective choice of services. Consequently, an important precondition for consumer democracy is a developed infrastructure of information systems with the intention to capture the *preferences* of citizens as well as the *choices* made by citizens (Bellamy & Taylor 1998). However, this article has treated the construction and introduction of cybermediaries in order to support citizens to act as informed and calculative consumers (Callon 1998) and associated controversies. In the introduction arguments were put forward for the value of this type of *supplementary* information systems that might be used by the consumer in their *choice* of services. Further it is here argued that, irrespective of to which extent there exists an infrastructure of information systems with the intention to capture the preferences of citizens as well as the choices made by citizens, the type of systems as appearing in this study is of great value to citizens as consumers of services. By their very existence they put citizens in a position that to a greater or lesser extent is more independent in their relationship with providers of public services. It is the belief of this author that the present illustrates features of such systems that are of positive value to citizens as consumers (Callon 1998).

In this section two other aspects will be pointed out that, according to the point of view of this author, might affect the *factual* role of cybermediaries as tools for consumers and in some respect also as tools to support consumer democracy. In other words, it is here emphasized that the previous discussion only has treated the *framing* of the informed and calculative consumer in the form of cybermediaries with certain qualities. Both aspects that will be presented here are of relevance in further studies of cybermediaries in quasi-markets in general, as well as in studies of actual use of such cybermediaries in particular.

To a large extent all four cybermediaries in this study have been constructed with *citizens* as a prioritized group of users, as well as against the background of their needs in certain situations of use. However, this judgment might be characterized as less applicable to *siris* on www.skolverket.se. The basis for the design here is rather to be found in the reports and statistics produced before the Internet-era than the needs of citizens. The differences in this respect between systems like *infoteket*, *indranet* and *ams* on the one hand, and *siris* on www.skolverket.se on the other hand might affect *factual* role of cybermediaries as tools for consumer democracy and is an issue for further research.

Also, *siris* is not a part of a situation where the citizen can be aligned to the cybermediary by means of a clearly defined use situation. In the case of *indranet* one might refer to a situation where students and parents are in a position to apply for certain programs and schools. Concerning *ams* and *infoteket* one might refer to the

somewhat more diversified type of situation when a citizen needs some information about educational and careers issues (a situation of receiving career guidance). The active promotion of the intention that the cybermediary should be used in such a situation and the very existence of a defined use situation itself might be characterized as a strong inscription that enforces certain behaviors (Callon 1991) According to the experiences of this author, as regards *siris* on www.skolverket.se the actual use situation is in practice much more vaguely defined. The recommendation is that *siris* should serve as a source of information for reflections on the activities in the schools of today, as well as when comparing different schools and choosing between them. As such, differences in this respect might be a further factor that affects the *factual* role of cybermediaries as tools to support citizens as consumers and, as a consequence, as tools to support consumer democracy.

Conclusions

The discussion above argued for the value of *supplementary* information systems with the intention of supporting consumers of public services. Furthermore, the cybermediaries aimed at citizens in quasi-markets as appearing in this study is also to be a means of *enhancing* the information systems infrastructure to support the influence of citizens as consumers of public services. As thus, they can be characterized as a form of information systems that might be added to the type suggested by Bellamy & Taylor (1998) featuring the preferences of citizens as regards public services as well as their choices. Consequently, they are considered by this author to be a necessary precondition for the ideal of supporting the position of citizens as consumers of public services as well as the ideal of consumer democracy.

Above it was noted that all cybermediaries in this study contained information about for example educational as well as careers issues. Few had facilities for calculating agents' preferences as well as facilities for ranking alternative choices, and there were no facilities to date for describing actions and resources to produce a preferred result from a long-term or holistic perspective. In other words, some aspects of the process of framing of consumers by means of cybermediaries seem to be more problematic than others.

In this study controversies were found concerning how the information should be provided, how to provide facilities for ranking, as well as what aspects that should be allowed to affect the design of facilities to calculate agents' preferences. What can be said about the seriousness of these controversies and the lessons learned in this respect? It is the conclusion of this author that the controversies concerning how information should be provided as well as the controversies concerning the aspects that should be allowed to affect the design of the facilities to calculate agents' preferences are of a less serious kind. Both types of controversies are related to issues in connection with the construction of the cybermediaries in a more limited sense. For example, they are related to the value of being visible as a provider of information, or to the issue of whether the facilities for careers guidance should be universal or designed according to the needs of certain groups. Also, the designers as appearing in this study perceived them as less controversial.

In contrast, it is the view of this author that the controversies concerning the facilities for ranking are of a more complex nature. They affect not only various aspects of the functionality of the cybermediaries, but also aspects that are related to the activities of

actors like the service providers themselves (the schools, universities etc.). Facilities for ranking can be characterized as a very direct and seemingly exact way of evaluating the service providers that, for this very reason, seem to be perceived as deeply controversial by some of the actors involved. This is also supported by other experiences, as described by Norén (2001). Also, as to the publicly financed schools within the educational system in many countries, there might be a contradiction between the goal of exposing the differences as regards qualities in provided services on the one hand and the goals of equal quality in the educational system as expressed in official proclamations and plans on the other hand (Levacic & Ross 1999). As thus, the issue of providing facilities for ranking is not only a question of framing a calculative consumer by means of introducing such a facility. For some service providers in quasi-markets, differences in quality *per se* as appearing in the facilities for ranking are perceived as being controversial in themselves. Here it is interesting to note that in May 2002 there was a suggestion to split the Swedish Board of Education into two separate agencies, one that deals with issues of evaluation, one that deals with issues of renewal of the work forms in Swedish schools. How the controversy of providing facilities for ranking is treated in future is an issue for further research.

This study has been theoretically inspired by ANT and the concept of framing (Callon 1998). However, it has been limited in two respects: in time (focusing on the “state of art” during the spring of 2002) as well as concerning the actors that have been included (the designers and the cybermediaries). As emphasized in the sections on method and theoretical framework above, the limited approach as used here is considered to be of value in a broad initial study as the present one. Despite this, it is believed that an appropriate approach in further studies should include a broader spectrum of actors, for example in the form of citizens as well as actors at the political level of these processes of framing (Norén 2001). This would give a fuller account of the actor-network processes in the framing of consumers in quasi-markets with the help of cybermediaries.

Also, broadly speaking ANT might be characterized as marked by its temporal perspective, or more particularly, by emphasizing actor-network processes that take place during an extended period of time. In the study this feature has been used only to a limited degree. This suggests the need for further studies that are carried out during a longer period of time. However, any kind of broader perspective must acknowledge the decisive role of *information technology* in the framing of quasi-markets and consumers of public services. It is the view of this author that not only the theoretically inspired conclusions but also the empirical experiences produced by this study illustrate this. The theoretical approach has illustrated the view that consumers as well as cybermediaries to support consumer choice are constructed in processes of framing that, in turn, might have come to very different results at a specific point of time. Further, processes like these are associated with both less as well as more controversial aspects and this study has given some insight into some of these. It is hoped that these insights are of value in further studies of cybermediaries to support citizens in quasi-markets.

Finally, this author is aware of the controversial nature of quasi-markets in themselves as treated in the political debate (Bellamy & Taylor 1998; Ferlie et al. 1996). As a consequence, the construction of the cybermediaries to support citizens as consumers in quasi-markets is part of this controversy. Here this controversy is recognized but it

is maintained that in the quasi-markets that exist there is a democratic value in equal access to information among consumers. In fact, the issue of providing information about public services is by some authors defined as a democratic issue in itself (Blomqvist & Rothstein 2000). Hopefully, the present study has provided critical knowledge and experiences of the role of cybermediaries to support consumers in quasi-markets that has just begun.

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