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## **New Contexts and Actors in Public E-Services Provision: The Example of Quasi-Markets for Education**

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### **Abstract**

*A fundamental assumption in this article is that not only the public administration but also semi-private and private agencies provide electronic intermediaries between public services and citizens in a quasi-market situation. The theoretical framework of this study views markets as constructed in contrast to natural phenomena. In these processes of construction the role of technologies such as the Internet is seen as decisive. This view will be applied to the quasi-market for upper secondary education using empirical experiences from Sweden. Two questions are addressed in the article: (1) How is the choice of education and available alternatives embodied in the electronic intermediaries and what are the accompanying consequences for citizens? (2) In what ways do public, semi-private and private actors take part in the design of electronic intermediaries in quasi-markets for education featuring as an element in quasi-market construction?*

### **1. Introduction**

Public service provision involves, according to a standard view, the public administration acting as service providers to customers, such as citizens and business. On the other hand it also makes available the communication channels that enable the first activity to take place (c.f. Tambouris & Spanos 2002). This article introduces a situation in which the public administration, but also semi-private and private actors, provide electronic intermediaries between citizens and public services produced in circumstances marked by marketisation arrangements ("quasi-markets") (Le Grand & Bartlett 1993).

For more than two decades quasi-markets (Le Grand & Bartlett 1993) are important features of the educational system in many of the OECD countries (Grubb 2002). They are characterized by different forms of demand/supply mechanisms, many times strengthening the role of citizen's preferences in their choice of public services either through mechanisms for citizen's direct choice of services or through a mediating, contracting agency. The sellers, or service providers, in these markets do not necessarily

strive to maximize profits but are in spite of this fact involved in competition with other sellers to attract citizens as buyers. The buyers, in turn, are acting not with their private capital as a resource, but often with some kind of voucher that entitles them to 'shop-around' for services.

It is here *claimed* that rather than representing the matureness in using a comparatively simple technology (Griffin & Halpin 2002) the electronic intermediaries between citizens and available educational services embody how various actors support and, through this, depict the choice of education. It is not a question of introducing information technology (IT) as a simple and settled tool, but one that is given meanings by its designers, owners and others involved in a *negotiation* process through its very features but also through other arrangements (Callon 1998, Callon, Méadel & Rabeharisoa 2002, Barry & Slater 2002). Further, electronic intermediaries are important elements in the *materialization* of the market (Callon 1998) for education affecting the conditions for citizens and service providers (Bar 2001).

Two questions are discussed in the article: (1) How is the choice of education and available alternatives embodied in the electronic intermediaries and what are the accompanying consequences for citizens? (2) In what ways do public, semi-private and private actors take part in the design of electronic intermediaries in quasi-markets for education featuring as an important element in quasi-market construction?

## **2. Actors, Markets and Technologies**

Analysing the technological construction of quasi-markets for education an important input can be taken from a current discussion in economic sociology (see e.g. the special issue: "The Technological Economy" in *Economy and Society* Vol. 31, No. 2) on the creation of markets and the role of technologies herein. In various publications Callon discusses economic markets as constructed phenomena in contrast to natural phenomena (Barry & Slater 2002, Callon et al. 2002). This perspective implies that there are different ways of organizing concrete and specific markets that are decided in a process of negotiation, making the construction of markets a political phenomenon. "Economic markets are caught in a reflexive activity; the actors concerned explicitly question the organization and, based on an analysis of their functioning, try to conceive and establish new rules of the game" (Callon et al. 2002, p. 194). The actors involved can take the form of economists, authorities, industrialists, consumer associations, social movements and many others (Callon et al. 2002). According to this perspective technologies play an important role in the processes of construction (Callon 1998, Callon et al. 2002). Interestingly, Callon defines the Internet as a premium example of technologies that have an important role in today's markets as a distributed cognitive device that indefinitely becomes richer in its capacities (Callon et al. 2002).

The present study focuses on the non-business use of technologies for transactions in markets being the least common type with some exceptions. For example, Nelson & Masmurniwati (2004) study facilitators for transactions pursued by academic institutions. Also, there are few studies of technologies in quasi-markets for public services. Bellamy & Taylor (1998) discuss the use of IT to collect information about the preferences of citizens in quasi-markets. Schneider (2001) discusses IT and the need for information among parents and pupils in quasi-markets for education. Josefsson & Ranerup (2003) introduce the notion that both public and other types of agencies might provide electronic intermediaries in quasi-markets with brief examples from healthcare and education. As a contrast, the present study specifically applies the theoretical perspective of markets as

constructed phenomena featuring electronic intermediaries in education (Callon 1998, Callon et al. 2002). Further, it features the electronic intermediaries supplied by various agencies in one field of public service provision (education) discussing the consequences for citizens and the role of respective actor in the technological construction of the quasi-market. Thus, there is an intention to *problemize* the current understanding of actors and contexts in public e-services provision (Tambouris & Spanos 2002).

In order to discuss the electronic intermediaries two models is applied expressing different views on how to embody the choice of education in technology. The first model is derived from the research field of electronic commerce but has been used in studies featuring the choice of education (Griffin & Halpin 2002). It defines the choice as a general, well-grounded business transaction (Bailey & Bakos 1997). In the light of this view an electronic intermediary might facilitate exchange of information, match consumers to services but also to create a safeguarded environment for the transaction (Bailey & Bakos 1997). As to the process related to transactions (Griffin & Halpin 2001), there must be an information phase, an agreement phase and a settlement phase during which the transaction is completed. The second model, here denominated as the guidance model of choice, are taken from the field of educational and careers guidance (Watts 1996). It emphasizes the personality as a ground for choice and puts the choice in a long-term perspective (Watts 1996). Thus, people need facilities to reflect on their interests and facilities to connect a specific situation of choice to future professional activities (“transition learning”).

In sum, the view of markets and technologies as outlined by e.g. Callon serves as a general framework for the discussion of the role of actors in the emergent construction of the market for upper secondary education. The transaction and guidance models are used in the more fine-grained description of the electronic intermediaries and in the analysis of the consequences for citizens (section 4-5). However, this description feeds into the analysis of the construction of educational markets and the role of technologies herein (section 6-8).

### **3. Research Setting and Method**

In Sweden students and their parents have the right to choose by means of voucher-like mechanisms among the various schools that are run by public, voluntary or private agencies. Between the ages of 7-15 students are often in a position to choose from schools run by various types of agencies. For young people between 16-19 there are a variety of upper secondary schools run by different agencies to choose from. These older students have at their disposal a wide selection of programs at the different schools. These sectors in the education system make up a quasi-market for education of considerable size and scope. This makes Sweden a case with strategic significance to the larger set of countries with quasi-market for education. The present study features experiences associated with the choice of upper secondary education where the idea of choice is well established, whereas in primary and secondary education the options for choice might locally be limited and the marketing of the options for choice even more limited.

This study is based on data from two types of public agencies: the National Agency for Education (Skolverket) and two regional agencies that organize through special agreements local markets for upper-secondary education (Göteborg, Skaraborg). Data has also been collected from two semi-private, national agencies: The Association for Semi-private and Private Schools (Friskolornas Riksförbund) with its website [friskola.se](http://friskola.se) and the Parents Association (Hem och Skola) ([hemoskola.se](http://hemoskola.se)). Lastly, two private agencies owning websites to support the choice of upper secondary education are also a part of the

investigation: syoguiden.com and efternian.com. The intention has been to include a majority of the most important and innovative actors.

In this study semi-structured interviews have been conducted with the project managers in each case. The national public agency and one of the regional public agencies featured in a previous study meaning that a reuse of interview data from 2001, 2002, and 2003 (nine interviews) was made possible. Apart from this, data from the rest of the cases was collected in Mars-April 2004 (six interviews). The interviews treated the history and functionality of the electronic intermediaries, but also their anticipated and actual forms of use. Also, the author probed into the general intentions with the activities in the light of the other actors' electronic intermediaries in the quasi-market for education. The electronic intermediaries have been examined through direct inspection with a focus on their functionality. Lastly, official documents were used as a source of information.

#### **4. The Quasi-Markets for Education in Sweden**

The first actor is situated at a national level: the National Agency for Education (Skolverket). In the autumn of 2001 it introduced on its website a database (Siris) with statistics focusing on e.g. the grading in schools providing facilities for quality assurance. On the agency's website there is, since 1998, the primitive, text-based portal Ways Out (Utväg) connecting all websites with information from every level of the educational system. In 2001, a government report (SOU 2001) suggested that a publicly financed national, independent portal should be introduced covering broad aspects of information and guidance on educational issues. In December 2003 the agency was given an official assignment to lead this project (Utbildningsinfo). An important ideal in this work is to provide a neutral source of information but recently also to support a long-term perspective on education through a portfolio (DS 2003). Table 1 shows that this national agency supports both views of the choice of education except that the transaction (the application) cannot be carried out through its facilities.

*Table 1: The National Agency for Education*

|                   |                       |   |
|-------------------|-----------------------|---|
|                   | Transaction phase     | Siris, Utväg, Utbildningsinfo   |
| Transaction model | Information           | Yes, all schools and programs in the country. Short, factual information and links to school's own website *  |
|                   | Agreement             | No  |
|                   | Settlement phase      | No  |
| Guidance model    | Self awareness        | Yes, text-based support emphasizing the importance of reflections on personality and competence, links to tests provided by syoguiden.com. More advanced facilities in prototype format |
|                   | Opportunity awareness | *See above  |
|                   | Decision learning     | Yes, general text-based support describing important aspects in decision-making. More advanced facilities in prototype format   |
|                   | Transition learning   | Yes, facilities to keep an updated portfolio of activities in prototype format  |

Regional agencies run by municipalities constitute a second group of actors. Table 2 shows the Göteborg region with its website Indranet.nu consisting of 13 municipalities including the second biggest municipality in Sweden and the Skaraborg region

([intagning.mellansjo.nu](http://intagning.mellansjo.nu)) consisting of 13 municipalities. The schools and programs are run by the municipal agencies or by private or semi-private ones. In both cases the regional markets have been created through an agreement between the actors involved offering students a free choice among the upper secondary education in the region. A main reason for introducing the electronic intermediaries in 2001 was to increase the efficiency of the application process and to offer new services showing the full picture of options. In the Göteborg region guidance professionals might work around the system and register the application, whereas in the other case this is less viable as an option. The use in the full process of application is 18% in the first case and 98% in the other. The regional, public agencies provide facilities to carry out the transaction that is fundamental to their history of administering the applications. To some extent they also support both perspectives on the choice of education, but concerning aspects like decision support and planning education in a long-term perspective facilities are either primitive or provided through other agencies.

*Table 2: The regional websites in Göteborg and Skaraborg*

|                   | Transaction Phase     | <a href="http://indranet.nu">indranet.nu</a>   | <a href="http://intagning.mellansjo.nu">intagning.mellansjo.nu</a>  |
|-------------------|-----------------------|--|---|
| Transaction model | Information           | Yes, all schools and programs in the region. Short, factual information and links to school's own website. * Link to a special website promoting the schools run by the municipality of Göteborg | Yes, all schools and programs in the region. Short, factual information and links to school's own website** |
|                   | Agreement             | Yes, except for the final personal signature   | Yes, except for the final personal signature  |
|                   | Settlement phase      | Yes  | Yes   |
| Guidance model    | Self awareness        | No, except for a link to private website <a href="http://syoguiden.com">syoguiden.com</a> and public sector websites providing links to interests-tests  | No  |
|                   | Opportunity awareness | *See above   | **See above   |
|                   | Decision learning     | No, except for link to other public sector website providing e.g. decision-charts  | No  |
|                   | Transition learning   | Yes, short info on possible professional futures, link to <a href="http://syoguiden.com">syoguiden.com</a> and public website <a href="http://ams.se">ams.se</a>                                 | No  |

Two semi-private actors feature as important; the Association for Semi-Private and Private Schools ([www.friskola.se](http://www.friskola.se)) and the Parents Association ([www.hemoskola.se](http://www.hemoskola.se)). The aim of both websites is to support their members and taking part in the debate about the conditions in the education system. They also provide information to pupils and parents on private and semi-private schools ([friskola.se](http://friskola.se)) and the education system in general ([hemoskola.se](http://hemoskola.se)) (Table 3) albeit with few relations to the two models.

*Table 3: The semi-private websites of the Association for Semi-Private Schools and the Parents Association*

|                   | Transaction phase     | friskola.se  | hemoskola.se   |
|-------------------|-----------------------|--|--|
| Transaction model | Information           | Yes, all schools that are members of the association. Short, factual information and links to school's own website * | No, only brief information on legal framework and information on programs and schools **   |
|                   | Agreement             | No   | No   |
|                   | Settlement phase      | No   | No   |
| Guidance model    | Self awareness        | No   | No   |
|                   | Opportunity awareness | *See above   | **See above  |
|                   | Decision learning     | No   | No   |
|                   | Transition learning   | No, except for contributions addressing the role of members' schools in society                                      | Yes, links to private, semi-private and public websites providing information on education |

Further, one prominent private actor is the company which owns syoguiden.com that started in 1994 as a resource for guidance professionals and students. Originally it was financed through grants from public agencies like the National Agency for Education but later it became dependent on sponsors. An important intention was to create a portal containing information about every thinkable type of educational and work-related issues when trying to establish a long-term relationship with users. This is shown by its high usage (100,000 hits/month). Efternian.com is newer (1996) and has a much more limited focus (upper secondary education with a technical and natural sciences' focus). It is a website dedicated to the choice of upper secondary schools. Both of these try to attract attention through links from other websites. Also, both use guidance professionals in order to increase the contacts with users. The private actors (Table 4) support both views, with the natural exception of facilities by which to carry out the application. However, the actual features are affected by e.g. sponsor relationships and the many links to commercial and public sector sources.

*Table 4: The private websites syoguiden.com and efternian.com*

|                   | Transaction phase     | syoguiden.com   | efternian.com   |
|-------------------|-----------------------|---|---|
| Transaction model | Information           | Yes, a plethora of structured links to public and private websites with relevance to the choice of school. Some links are saliently placed because of sponsorship relations * | Yes, short, factual information on programs that are related to technical and natural science if registered on the site** |
|                   | Agreement             | No  | No  |
|                   | Settlement phase      | No  | No  |
| Guidance model    | Self awareness        | Yes, links to a plethora of interest-tests and knowledge-tests  | Yes, some interest-tests  |
|                   | Opportunity awareness | *See above  | **See above   |
|                   | Decision learning     | No  | No, except for a FAQ focusing studies in upper secondary education  |
|                   | Transition learning   | Yes, links to a plethora of structured private and public websites providing information on higher education and careers opportunities  | Yes, careers stories from people who has studied the focused type of programs   |

## 5. Citizens and the Electronic Intermediaries

The electronic intermediaries presented show the ways in which public authorities, but also semi-private and private actors, provide facilities that are related to the choice of upper secondary education. Here, the transaction and guidance model of choice represent different views on citizens generation of preferences preceding the choice. In our investigation the guidance model of choice defines this as an important activity that might be supported by technology (interest-tests, knowledge-tests etc) (Table 1,4). It is here argued that the appearance of this view on preferences is unprecedented when it comes to public e-services provision. On the other hand, in the field of educational and careers guidance the generation of preferences is defined as a relevant activity in connection with the choice of education irrespective of whether IT is used or not (Grubb 2002). Consequently, the generation of preferences is relevant in all situations in association with the choice of education and cannot be attributed to quasi-market situations only.

The transaction and guidance models represent different views on the extension in time as regards the use of technologies. When characterized as a general, well-grounded business transaction the use of the technology is limited to the individual transaction. In contrast, the guidance model views technology as an instrument that should be used in order to sustain the choice of education but also future professional life. In our experiences this view is supported by e.g. syoguiden.com. Even more markedly, an actor like The National Agency for Education aim at a more or less life-long use of its facilities in planning educational activities (c.f. the proposed portfolio). It is interesting to note that the use of commercial websites is voluntary, whereas public agencies are in a position to introduce routines that make it more or less obligatory to use certain facilities to receive aspired services (Warkentin et al. 2003). However, there are differences between the public agencies concerning the will, but also the capacity, to introduce such routines. A public agency like the National Agency for Education is assigned tasks in association

with its general obligations to inform and evaluate. This means that the relationship between their technological facilities and actual situations of choice are more indirect than in situations where the main aim is to support the actual choice of education (Table 2). Also, in the second type of situation there might be differences as exemplified by the arrangements in Skaraborg and Göteborg making the use of the electronic intermediary more or less optional.

Lastly, our experiences show the ways in which the electronic intermediaries materialize the quasi-market for upper secondary education to citizens. The most obvious example is the intermediaries provided by the regional agencies (Table 2) that directly are related to the very choice of education and the available options in the region. Also, the other actors play different roles in the negotiation and materialization of the market (section 6). In this materialization the provision of information by public and private actors, as well as the treatment of public and private providers of public services is affected, thus influencing fundamental conditions in the market (Bar 2001) (section 7). This means that others than lawmakers deciding about the framework regulating the quasi-market and public agencies traditionally featuring as providers of e-services contribute to the interface between citizens and public services. Concerning quasi-markets for education this is especially significant since the choice as such is important and concentrated in time. Previously the overview of options was limited by the information given by guidance professionals through oral or written information. A more active individual could use traditional means of communication to contact schools and perhaps central authorities. As in Sweden, there are still some factors left that limit the options for choice from citizens' point of view. One is the absence of agreements between municipalities offering young people to choose freely between municipal schools in a region similar to those described above. Individuals might also have difficulties in using the electronic intermediaries and therefore not getting an overview of options. However, in Sweden Internet access and use rates are high in relevant age groups.

## **6. The Technological Construction of Quasi-Markets for Education**

How do the various types of agencies take part in the negotiations where concrete and specific markets are moulded? First, the electronic facilities provided by the National Agency for Education in Sweden show all primary, secondary and upper secondary education in the country due to the agency's assignment to inform. The agency is given official assignments to follow up activities in the school system, a task that is partly carried out through provided facilities in connection with the electronic intermediaries similar to the League Tables in the UK. Further, the activities to put up a portfolio are part of national policies for lifelong-learning (DS 2003). This means that actors like the National Agency for Education carry out official assignments emanating from their role in the national bureaucracy. In the present case the role is to e.g. show and regulate the national market for education but recently also to promote ideals of lifelong learning thus hopefully extending the use of provided technologies from the side of citizens.

Second, regional or local public authorities are subject to these activities, but might be in a position to implement additional regulatory frameworks extending market for upper secondary education. This offers new opportunities to citizens since free access to schools is limited to semi-private and private schools but do not include municipal schools in other municipalities. The administration of the application process and the information about available opportunities comprising the whole region is supported by Internet technology to the benefit of the administrative authorities, as well as the schools and the applicants themselves. Thus, the roles of public regional or local agencies are to open up and sustain a specific geographically delimited market for education.

Further, semi-private actors are active in the technological construction of the quasi-market. Previously the Association for Semi-Private and Private Schools provided information of non-municipal schools that not always were presented in e.g. local government websites, but today such information is much easier to find. Instead this association, as well as the Parents Association, takes part in the political process in which the national, regulative framework is moulded through the electronic intermediaries. Consequently, the role of these actors is of a discursive nature in the construction of the quasi-market for education.

The electronic intermediaries supplied by private actors are in a more direct way affected by commercial interests due to their sources of funding. However, the owners strive to attain a high use of their facilities. This means that these facilities not necessarily are delimited to those supplied by sponsors but include those that might be expected to attract interest from the side of the potential (non-professional and professional) users. Due to the fact that use of their facilities is voluntary they must act in ways that constantly evolve to establish a long-term relationship e.g. by publishing attractive editorial information and through a broad focus on the educational system and professional life. In sum, they provide structured bazaars containing information placing the educational activities in upper secondary education in a long-term perspective thus hopefully extending citizens' use of provided technologies.

Most importantly, the different roles as outlined should *not* be seen as a static and purposeful distribution of tasks, but rather as a characterization of recent activities in the negotiated construction and materialization of the quasi-market for education. This e.g. means that the actors cooperate and use each other's resources e.g. by linking to other actor's information (section 7). Not less often, in ways that change during the course of time they strive to become citizens' most prominent technological representation of the quasi-market for education.

## **7. New Challenges to E-Government**

In the previous two sections challenges were outlined as a result of electronic intermediaries featuring in quasi-market construction. Further, this study illustrates the ways in which semi-private and private agencies compete with public actors as providers of electronic intermediaries. Of principal interest is also the cooperation between public actors and others in the form of links to commercial actors found on public actors website (Table 1-2). At the same time, large commercial actors like e.g. syoguiden.com (Table 4) might pursue an ambition to provide high quality information both from commercial and public agencies trying to establish a good reputation. This competition and cooperation add new aspects to the issue of creating trust in public e-services provision often focusing on the confidence from the side of citizens in the electronic facilities *per se* (Warkentin et al. 2003). Further, the principal issue of public agencies both cooperating and competing with private agencies is of relevance also outside of quasi-market situations. Since the middle of 1990's public and private agencies introduced electronic intermediaries to be used by individuals in their choice of education in the field of educational and careers guidance (Grubb 2002). However, in circumstances *not* market by quasi-market arrangements the electronic facilities form an electronic window to available opportunities rather than being an element in market construction.

There are other challenges with a specific relevance to quasi-market situations only. The neutrality of public sector actors as owners of electronic intermediaries showing services of different types of providers and their neutrality as provider of information about schools run by municipal agencies are two very down-to-earth issues here. For example, concerning the National Agency for Education their independence is a prominent theme in interviews and official documents (DS 2003). The electronic facilities in the Göteborg- and Skaraborg- regions exposes an ambition to provide a neutral facility in relation to the different municipalities, but also in relation to the various types of providers. The experiences also show that what might appear as an impartial public agency, such as the city of Göteborg, might use the technology to promote their own schools (Table 2). Thus, through the electronic intermediary important conditions in the market are moulded (Bar, 2001) both from the point of view of the citizens and the providers.

## **8. Conclusion**

In this article new challenges are introduced to the field of e-government when various actors pursue different roles in the technological construction of the quasi-market for education. In this process public, semi-private and private actors compete and cooperate, thus blurring the limit between the public and the commercial sector. However, it is here argued that our object of study pertains to the field of e-government for several reasons. As e.g., it relates to the relationship between the state and the individual, and the market is financed by public means. Viewing markets as constructed phenomena is especially relevant in quasi-markets because laws and regulations are the very reasons for the market coming into being, whereas technologies feature as important in their materialization.

To the research field of electronic government the uptake, trust in, and perceived usefulness of electronic intermediaries from the side of citizens is decisive (Warkentin et al. 2003). This is why future research should address issues like the quantitative use of different actors electronic intermediaries in quasi-markets for education as well as the perceived value from the point of view of citizens.

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