

THE NEED FOR E-SERVICES

The Case of the e-Citizen

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Abstract: Internet has an important role in our society. It has had a significant impact on the way business can be done. Here we are looking beyond e-business; today public sector organizations are developing various electronic services for citizens. In both cases understanding user needs is the basis for successful e-services.

1 INTRODUCTION

Information technology has become more and more important in our society; it is a driving force in economic development. Furthermore, information technology impacts the social and cultural environment. Internet is this type of phenomenon; here those who can access internet are in a different position than people who do not have this opportunity (Cullen, 2001). Equal access to internet and services that are made available through it is an issue all over the globe, and it concerns also citizens in the industrialized world.

The first applications that were built on the internet were related to electronic business. Here efficiency, costs and global marketplace were in a central role. However, now the emphasis has shifted to services and added value to the user (Rust and Kannan, 2003). Following the development in e-business also public sector is developing services which take advantage of information technology and internet. In both cases anytime and anywhere are important issues, they refer to the possibility to access information and services instantly, independently of geographical location. This means that there is a need for e-services, which are here understood as services, processes and activities which can be done with a computer through the internet.

Today there are all kinds of applications and services available through the internet. However, a large number of activities require one to use the phone or go to an office in order to have the task done.

This paper aims to answer following questions: Who is responsible for developing e-services? Who should take care of the infrastructure? And what is user's role here? Our focus is especially on services provided by public information systems. These systems are targeted to citizens of a geographically limited area like a city, municipality or a nation, in contrast to business services which see consumers or other business companies as their target users (Orman, 1989; Sundgren, 2005).

2 INFRASTRUCTURE OF THE E-SOCIETY

The user has a variety of services available when connected to the internet. What is required is an access-point to the network, which can be a hard-wired connection or wireless hot-spot. Terminal equipment is not limited to any particular manufacturer or software provider. Also from geographical point of view there are no limits: internet-use may take place at work or at home, or the user can connect with a mobile device.

The services that are offered through the internet are here referred to as e-services (Rust and Kannan, 2002; Rust and Kannan, 2003). Most e-services are related to information: the internet is a way to access information independently of time and location. However, there is an increasing demand on interactive and transaction-enabled services through the internet (Ancarani, 2005). Commonly, e-services need to be integrated into processes and systems of the organization that provides them, especially if the

services are transaction-related (de Ruyter et al., 2001).

Application of e-services can be found both in public sector organizations (e-government) and in private sector companies (e-business). (CITIZYS Research Group, 2007). There are numerous examples on electronic, information technology powered public sector services already today. The citizen may use an arbitrary computer connected to the internet and apply for children's day-care, or inform the authorities that the address has changed, for example. These can be done by filling in a form on-line, or downloading it and printing for manual processing. Other typical e-services include seeking information from service providers' internet-pages or requesting further information and advice. It is still clear that many public services are in their early stages; often they are based on existing ways of doing things instead of thinking what citizens need (Howard, 2001). Services need to be integrated which calls for a total re-planning of services in order to better meet the needs of the citizens (Atkinson and Leigh, 2003).

Whereas e-business is concerned there is a vast amount of different e-commerce sites covering practically every imaginary field. Travel industry is a good example of an industry, which uses information technology extensively. The customer or the traveller has the possibility to make reservations, get to know hotels, car-rental services and more in the travel destination. The internet gives the traveller services which earlier were possible only through the travel agency. This gives the traveller better control on the travelling experience. The result is a change in the infrastructure of travel industry; today customers are increasingly making reservations by themselves. From the service providers perspective it is critical to have visibility in the internet; the service should be listed when the traveller is planning trip and uses search engines like Google in this. The issue here is that traveller needs to do the planning; technology just shows different options (routes, hotels, fares etc.) to choose from. It is likely that in the future this is not enough, more advanced services will be developed which help in travel planning and adjust to changes in schedules, for example (de Ruyter et al., 2001).

To summarize, today there are many tasks, activities and services which are available as e-services. However, there are still several areas where there is a clear need for e-services. This is the case especially in non-commercial services which are provided by government or municipal organizations. For example, information change between school

and home could benefit from electronic services. The challenge here is who should develop the infrastructure that is needed in these services.

2.1 Developing e-Services

It is common that the motive in development of e-services is to cut costs in operations or increase quality of service. However, these goals have little to do with needs of the user. As a result, there is a need to shift focus to the client, customer or citizen who is the user of services (Atkinson and Leigh, 2003; Rust and Kannan, 2003). Let us look at e-services in public sector as an example.

In public services citizen is the user of the service and the actor whose needs should be understood. In other words, in real life various services are being offered, but not all are going to become very popular. The actual usage of services is important, not only the amount of different services or service providers behind them. The perceived quality of e-services and added value as seen by the user is in a central role in this setting.

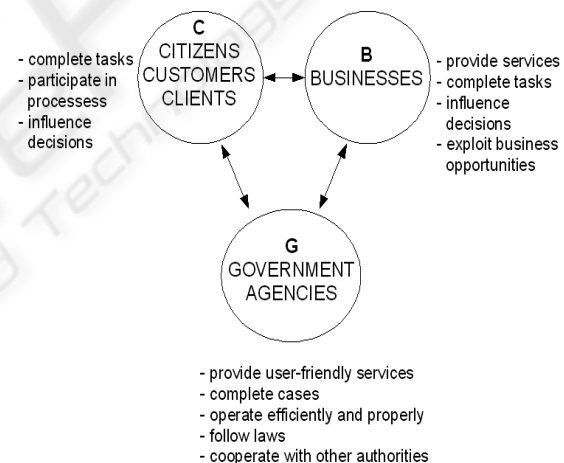


Figure 1: Actors in public information systems (Sundgren, 2005).

There are organizations from private business and agencies which are involved in offering e-services. Service providers can be organizations which are "actual" service providers, or they can be outside companies which develop, run or maintain the service in cooperation with the actual service provider. For example, the programming of the application could be done by a specialized software company while the actual service provider concentrates on what is the content of the service. Even though there would be several parties involved

in developing and providing the service one should be the service provider who is responsible for the service. This service provider may set rules like minimum requirements or standards.

In development of e-services there are differences among organizations in terms of technical skills, organizational structure and in the attitude towards innovations. This means that not all organizations are ready for changes, and the pace of development differs among organizations (Ancarani, 2005). Thorough planning is therefore needed in development of more sophisticated e-service solutions; this is the case especially in public sector organizations.

3 DISCUSSION

The first wave of e-business was based on selling commodity goods to a geographically large potential customer base and reducing costs in the supply chain. Also the possibility to build a 24/7 service to the customer was seen as a critical success factor. However, the network based electronic environment calls for a more customer-centric approach (Riel et al., 2001). Self-service combined with the ease in comparing prices mean that the customer can switch to another internet-store. In many services customer turnover is high, and considering the costs of acquiring new customers keeping the customers deserves more attention.

The infrastructure and availability of e-services is heterogeneous. In some fields there are plenty of services for the user to choose from, and in other settings electronic approach to doing things is uncommon. For example, travel planning is one of the tasks that benefits from electronic reservation systems and information that is readily available from the internet. In health care sector electronic services are not as widely spread as is the case in travel business.

Most services which are available through the internet are related to information delivery (Layne and Lee, 2001). However, e-services which include online interaction and transaction processing are scarcer. This is understandable as coding a web page and publishing information on it is relatively easy. Instead, interactive and transaction oriented e-services need to be connected to databases and other internal information systems. These require significant amount of planning compared to development of informative web pages (Howard, 2001; Atkinson and Leigh, 2003).

It seems that understanding user needs is increasingly important in development of e-services. Today users of internet-based services want to have control over the transaction (Meuter et al., 2000). The user wants to know the status of a packet delivery or an application form, for example. Also in public sector the successfulness of e-services depends on understanding citizens requirements. Consequently, service and user needs are in a critical role in development of e-services (Atkinson and Leigh, 2003; Rust and Kannan, 2003).

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