



**CHAPTER SIX**

# **Building an Infrastructure to Manage Electronic Services**

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For an organization to be able to deliver electronic services efficiently and professionally requires a “service infrastructure” including organizational solutions for logistics and customer (citizen) interactions. This chapter reviews a study covering three years of efforts by nine cities in eight European countries in developing such solutions.

Generally, Web projects were seen as technical projects; though in fact issues pertaining to users and organization were most important, they were largely neglected.

We found 12 distinct “challenges,” situations where the setting changed and the process was found in a stage of improvisation until new stability was achieved. The challenges fall into four categories, concerning users (4 challenges), organization (6), economy (1) and technology (1).

We found that the overall process was largely unstructured and improvised. Stabilizing factors were central government policies (national, European Union), the general technical development, market demands and a cadre of Web agents” fostered within the organizations over years of Web projects.

There was typically a missing infrastructure link, a body competent of managing the whole process of bundling services from different service providers and publishing them in a coherent fashion, providing support to service providers during the process of inventing, refining and evaluating services, improving operations and conducting the necessary but typically ignored activities of analysis of service quality and policy making.

Our conclusion is that there is a great lack of strategic leadership in the field of electronic services in local governments in Europe. This is a big problem considering the importance of that sector and the challenges it is facing.

## INTRODUCTION

Over the past few years, many local and regional governments have followed companies in setting up “home pages” on the Internet. The ICMA Information Technology Surveys show that already in 1997, 90% of large US cities had Web sites, 29.2% of the small cities and 66.6% of medium sized ones (Norris, 1999). For Europe, there are no comprehensive statistics, but as one example the SUNET catalogue of Swedish municipal sites lists 227 sites, 78% of the total number of municipalities (SUNET, 2000). The figure should be 100%; a search on the Web for each of the remaining town names found a site in every case. Many cities have two sites, one “city.se” and one “city.com,” the latter often including business partners. Even though the Scandinavian countries are above the European average in Internet use in general, there is no doubt that Web sites are becoming widely used in all of Europe.

Despite these indications of widespread use, expectations for advanced interactive services integrated in business procedures seem not to have been fulfilled. Investigations of adaptation of Web systems show that although generally in use in cities, the sophistication is generally not impressive. Norris (1999) found, based on surveys of actual IT use and managements’ perceptions of usefulness of IT, that adaptation of “leading edge information technologies” does in fact increase, and predicts that the penetration will be more deep in the future. At present, the depth seems less than impressive overall. Scavo and Shi (1999) surveyed 145 US municipality and county government sites and found use to be less sophisticated. Citizen interaction opportunities and service delivery were rare while promotional material and bulletin boards were abundant. Norris (1997, p. 147) attributes the current shallowness for Web applications partly to their newness—depth occurs incrementally—partly to the fact that more advanced technologies are more complex, requiring time, funding and effort to become fully deployed.

This is where this chapter starts. There is a big difference between the different kinds of applications. While promotional material is static and simply published on the Web, services and citizen interaction require a *service infrastructure*. Mails must be answered correctly, goods or services delivered promptly and securely, complaints and inquiries must be answered etc. Different media—the Web, telephones, call centers, etc.—must be integrated to provide smooth service processes, both as seen from the customer side and as concerns efficiency in internal operations. This requires more advanced technology (e.g., for identification and payment) and new institutions (e.g., a multiple-media reception and delivery service). There are clearly advantages to expect from a successful employment of Web technology, both in terms of economy and of improved customer relations. As an example, the ServiceArizona project implementing Web-based transactions such as ordering personalized number plates and replacing lost ID cards resulted in cost cuts per transaction from \$6.60 to \$1.60, and a saving of \$1.7 million per year with 15% of the transactions being done via the Web. Further, the motor vehicle department scored an 80% approval rating, way above other departments (Symonds, 2000).

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