

ONE STOP EGOVERNMENT FOR SMALL AND MEDIUM-SIZED ENTERPRISES (SME): A FRAMEWORK FOR INTEGRATION AND VIRTUALIZATION OF PUBLIC SERVICES

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Abstract:

Providers of public services are required to reengineer their product and process organization in view of the EU services directive. The fundamental requirements include the establishment of points of single contact for enterprises and the procedures and formalities relating to access to a service activity and to the exercise thereof by electronic means. Of the underlying information systems and the IT infrastructure this has direct influence on the organization. In addition to the federal and regional authorities, the municipalities are especially affected by this, as they hold most of the process and decision-making authorities of the government services sector. Virtualization and integration of service goods will be subsequently introduced as essential differentiation criteria. The strategic approach to implement the EU services directive will be substantiated for the state capital of Düsseldorf in terms of a “One-Stop eGovernment” with main focus on small and medium-sized enterprises.

1. Introduction

From the European Commission’s point of view, the eGovernment is at a significant turning point. Additional substantial progress is only possible, if certain essential prerequisites have been fulfilled. Against this background, the EU Commission has established the “i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All” for the European -wide access to electronic authority services for the period of up to 2010 [1]. Within the framework of the fulfillment of the prerequisites, special importance is attached to the directive 2006/123/EC of the European Council on single market services, in short EU services directive [2]. The EU directive requests the member states to put the legal and administrative provisions required for the implementation of the objectives of the directive into force by the end of 2009. The directive shall significantly simplify and facilitate the free transaction of services within the community. The center of the objectives is the administrative simplification in favor of enterprises (Chapter II of the directive). The member states are thus requested to:

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- examine the existing procedures and formalities for starting and practising service activities for their simplicity and, if necessary, simplify them, (Article 5 – Simplification of procedures).
- provide for central contact partners, through which service providers are able to manage all processes and formalities within the framework of their service activity (Article 6 – Points of single contact).
- ensure that all processes and formalities can be managed from a distance and electronically through the points of single contact or the authority responsible (Article 8 – Procedures by electronic means).

The article is structured as follows: the second section will deal with the required prerequisites for the development of a One-Stop eGovernment on the basis of virtualization and integration of services. This includes the development of a reference framework for structuring the strategic positioning of public service providers as well as the discussion and explanation of four scenarios. Starting from this basis, a strategic approach to the integration of public services will be developed. By means of an application case, the approach will be substantiated in terms of a “One-Stop eGovernment for enterprises”. The article ends with a summary and future prospects.

2. One-Stop-eGovernment

One-Stop-Government describes organizational concepts for the integration of public services in one location and one-stop. Typical examples for this are administrative offices for citizens or service centers. After inquiry in the “front office”, complex processes can be handled in the “back office” more or less division-based and cross-authority as well [3]. Nevertheless, the “customer” needs to visit the service authority in person to initiate and manage his request. Due to the availability of the range of services in electronic form, the One-Stop Government becomes the electronic One-Stop Government, in short One-Stop eGovernment. The integration and virtualization of public services will be subsequently classified in this respect.

2.1. Reference framework and scenarios

In view of the EU services directive, enterprises should especially be able to manage the formalities and processes required for starting and practicing their service activities from a distance as well. In doing so, the dimensions virtualization and integration of services are essential differentiation criteria. Virtualization requires that public services be available in digital form and thus paperless. The degree of virtualization describes, to what extent a request is processed independently of location and time from the customer’s point of view; the degree of integration of services describes to what extent partial services relevant to the request are offered during the administration process from the customer’s point of view.

In terms of the reference framework “One-Stop eGovernment”, a matrix for the classification of the provision of services from the customer’s point of view can be drawn up based on the two dimensions integration and virtualization of services:

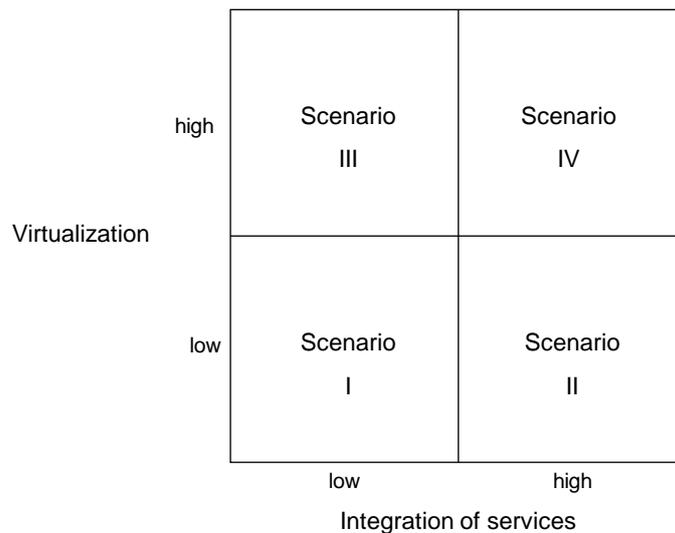


Figure 1: Reference framework One-Stop eGovernment

As a possible structure, four central scenarios for the providers of public services can be directly defined:

- **Administrative organization (Scenario I):** The lower left square marks public administrative authorities which offer their services predominantly authority-based. Integration of services only partially takes place, if at all. This means that customers usually need to visit in person the respective authorities providing partial services for the request in order to have the formalities managed, i.e. the degree of integration of services is low throughout. Online availability of the services offered is limited, i.e. the degree of virtualization of public services is low as well.
- **Service center (Scenario II):** The second scenario located in the lower right square of the matrix describes public administrative authorities which offer customer-oriented integration of services. An example of this is a central service center which offers the most important services of a public administrative authority for a specific target group (e.g. administrative offices for the general public). The degree of integration of services is high. This scenario, however, requires customers to visit a central location in order to have their requests dealt with. If at all, public services can be rarely initiated or handled via electronic means, (e.g. arrangement of appointments); the degree of virtualization is thus low.
- **Virtual administrative organization (Scenario III):** The upper left square marks the third scenario. Similar to Scenario I, public administrative authorities offer their services predominantly authority-based and without significant integration of services. The degree of integration is thus low. The difference to Scenario I is the virtualization of services. Customers usually do not need to physically visit the respective authorities offering partial services in order to have their requests dealt with, but are able to initiate and handle the required communication and applications electronically to a large extent. Examples of this are municipal authority portals providing public services for their respective area of responsibility in electronic form and offer them online. The customers may, however, need to visit numerous different authority portals to obtain the entire service.
- **Virtual service center (Scenario IV):** Scenario IV in the upper right square represents the services of public administrative authorities offering a clear and useful integration of services for the customer. The degree of integration is thus high. In addition, this integration is usually available in electronic form so that a customer is able to access them independently of location and time and initiate and manage his administrative processes electronically to a large extent.

The top right hand corner stands for a public organization comprising all customer-oriented services, which can be completely managed online. The fourth square thus illustrates a scenario in which the services can be used both locally and independently of location.

2.2. Strategies

In accordance with the reference framework described and the implementation of the EU services directive, there are various possible strategies for the public administrative authorities. In doing so, the reference framework allows for public administrative authorities to be assigned to a starting square during the development of their specific strategic approaches, from which the various scenarios can be discussed, taking the local boundary conditions and objectives into consideration. As a consequence of the implementation of the EU services directive, the establishment of virtual service centers (Scenario IV) will become necessary, especially in case of enterprise-related services. Starting from Scenario I, there are the following three possible migration paths:

1. Transition from Scenario I via Scenario II to Scenario IV,
2. Transition from Scenario I via Scenario III to Scenario IV,
3. Transition from Scenario I directly to Scenario IV.

In German speaking countries, there are at present predominantly (virtual) administrative organizations (Scenario I and III) for enterprise-related services at municipal level; thus, special importance is attached to the second migration path. Starting from this basis, the demand in enterprise-related services will be subsequently determined and a strategic approach to the integration of public services developed. In order to demonstrate the second migration path, the concept of a “One-Stop eGovernment for enterprises” is presented based on the case study of the state capital of Düsseldorf and the strategic approach to an enterprise-related integration of services.

3. Case study “State capital of Düsseldorf”

Düsseldorf, capital of the state Nordrhein-Westfalia in Germany, has about 580,000 inhabitants. The public administrative authorities of the city of Düsseldorf employ about 9,100 people, distributed throughout about 440 administration buildings. The structure is decentralized and subdivided into seven departments with 48 assigned offices and institutes each. Based on a Fat Client Server architecture, the 6000 IT jobs are workplace-based and completely linked to each other via a communication system throughout the city.

3.1. Strategic approach

In the reference framework described (2.1), the starting square referring to the enterprise-related services of Düsseldorf is located in the upper left area (Scenario III). All authorities have local city portals, through which the services can be initiated and managed in various forms. The subsequent diagram positions the enterprise-related services of Düsseldorf within the established reference framework. The starting circle illustrates the current status, the circle with the broken lines shows the goal and the adjacent circle to the right the further development potentials.

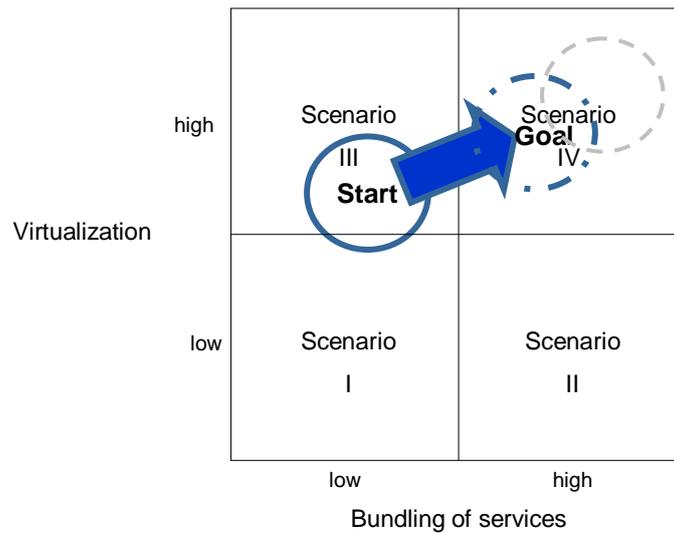


Figure 2: Case study “State capital of Düsseldorf”

The objective is to offer enterprises, especially in the case of across-authority processes, one-stop administrative services to a greater extent. At the same time, the degree of virtualization is already high at present, as a great number of authority-based services can be accessed via authority portals. In view of the EU services directive, the integration of services will be increased to the same extent so that an advanced integration of services is achieved on the way to the final goal, i.e. a virtual service center.

3.2. Stage of development

The One-Stop eGovernment concept for enterprises in Düsseldorf is directly aimed at the requirements of the remote electronic process management, in accordance with the EU services directive. An enterprise portal [4] represents a central component here, which helps the city to focus its online organization on the target group.

One of the main requirements of the EU services directive is the establishment of points of single contact for enterprises. As a result, contact partners have been appointed for all enterprise-related sectors in the city of Düsseldorf. They have integration and coordinating functions during cross-authority and cross-sector administrative processes. In addition, they are competent partners for enterprises, especially during permission procedures [5]. All contact information is directly accessible via the portal.

Incoming requests and interactions are viewed and immediately processed by the city’s Office for Economic Development or forwarded to the points of single contact in the administrative authority or to another institution in charge. Requests will be processed within two days or information given regarding a specific contact partner and the action taken (service guarantee). Every request is supported personally and technically via a “job function” in the city’s communication software. This procedure will be extended to personal, telephone and postal contacts. The employees of the Office for Economic Development are thus informed of the process status and are always able to provide the enterprises with up-to-date information. Within the framework of electronic request tracking, they are able to actively support the administrative process in terms of an internal tracking process.

4. Summary and prospects

The article deals with the differentiation criteria virtualization and integration of services and arranges these in a reference framework for structuring the strategic positioning of public service providers; based on this reference framework, four central scenarios for the providers of public services can be defined. The strategic approach to enterprise-related integration of services will be substantiated in terms of the case study of a “One-Stop eGovernment for SMEs” in Düsseldorf.

The introduction of an enterprise portal will significantly increase both the degree of virtualization and the integration of services in Düsseldorf. Analogously to “lifecycle concepts” in public portals [6], a distinction is made in Düsseldorf between the enterprise situations (1) foundation, (2) establishment/growth, (3) crisis and (4) succession [7]. This shall, however, only remain an intermediate phase. The implementation of the EU services directive especially requires that authority-related partial services be compiled to customer-oriented service integration with regard to the procedures by electronic means. Furthermore, the services for local small and medium-sized enterprises [8] will be constantly adapted to the economic progress.

References

- [1] Commission of the European Communities, COM (2006) 173: i2010 eGovernment Action Plan: Accelerating eGovernment in Europe for the Benefit of All. http://ec.europa.eu/transparency/archival_policy/docs/moreq/action_plan_i2010_en.pdf, accessed at: 2008-01-14.
- [2] Directive 2006/123/EC of the European parliament and of the council on services in the internal market, L 376/36, 2006. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:376:0036:0068:EN:PDF>, accessed at: 2008-01-14.
- [3] Wimmer, M.: Online Services für one-stop Government: Anforderung an die Prozessmodellierung (in German). http://www.egov-project.org/egovsite/wimmer_egov.pdf, accessed at: 2008-12-23.
- [4] State capital of Düsseldorf (editor). Online-Services for small and medium-sized enterprises. <http://www.duesseldorf.de/mittelstand/index.shtml>, accessed at: 2008-02-06.
- [5] Millard, J.: European eGovernment 2005-2007: Taking stock of good practice and progress towards implementation of the i2010 eGovernment Action Plan. European Commission DG Information Society and Media - eGovernment & CIP Operations, 2007.
- [6] Traunmüller, R.: The Place of Interoperability in e-Government Research, Annual TERREGOV Conference e-Government Interoperability, Geneva, 2005.
- [7] Bleek, W.-G.: Lebenslagen als Unterstützung bei der Benutzung und Modellierung von städtischen Portal-Webseiten (in German) In: M. Herczeg, W. Prinz, H. Oberquelle (editors): Mensch & Computer 2002: Vom interaktiven Werkzeug zu kooperativen Arbeits- und Lernwelten (in German), p. 75-84, Stuttgart, 2002.
- [8] Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises (2003/361/EC). <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:EN:PDF>, accessed at: 2007-12-21.