One Stop eGovernment for Small and Medium-Sized Enterprises (SME): A Strategic Approach and Case Study to Implement the EU Services Directive

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Abstract

In view of EU services directive, providers of public services are required to reengineer their product and process organization. Of the underlying information systems and the IT infrastructure this has direct influence on the organization. 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. 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 bundling of service goods will be subsequently introduced as essential differentiation criteria. In doing so, the degree of virtualization of public services is already high in many places. Nevertheless, this development with respect to the bundling of services is still in the initial phase. This article presents a strategic approach to the bundling of public services. The strategy approach will substantiated for the state capital of Düsseldorf in terms of a "One-Stop eGovernment" with main focus on small and medium-sized enterprises.

Keywords: EU services directive, One-Stop eGovernment, Enterprises, case study, strategic approach

Introduction

In the past, the establishment of citizen-oriented service centers and eGovernment services had top priority. Due to the requirements of the EU services directive, the focus is shifted to enterprise-

oriented applications and "the customer's perspective becomes more and more the focus of attention" (Wolf & Krcmar, 2006, p.3). The municipalities have to increasingly keep pace with this development as well, since they hold most of the process and decision-making authorities (BMI, 2006a, p.15).

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 Europe-wide access to electronic authority services for the period of up to 2010 (COM, 2006, p.4f.). 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, briefly EU services directive (EPC, 2006). The EU directive requests the member states to put the legal and administrative provisions required for the implementation of the objectives of the directive until the end of 2009 into force. 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:

- examine the prevailing procedures and formalities for starting and practicing service activities for their simplicity and, if necessary, simplify them, (Article 5 – Simplification of procedures).
- provide for central contact partners, via 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 remotely and electronically via the points of single contact or the responsible authority (Article 8 – Procedures by electronic means).

The article is structured as follows: the second section will discuss the required prerequisites for the development of a One-Stop eGovernment on the basis of the dimensions virtualization and bundling 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 strategy approach to the bundling 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.
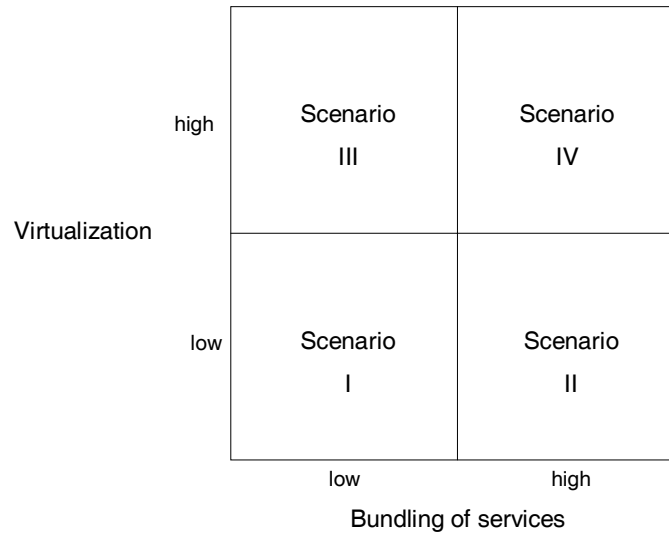
One-Stop-eGovernment

In view of the EU services directive, enterprises shall especially be able to manage the formalities and processes required for starting and practicing their service activities remotely as well. In doing so, the dimensions virtualization and bundling 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 bundling 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 this context, One-Stop-Government describes organizational concepts for the bundling of public services at one location and one-stop. Typical examples for this are administrative offices for citizens or service centers. After inquiry at the "front office", complex processes can be handled at the "back office" more or less division-based and cross-authority as well. (Wimmer, 2002, p.3). Nevertheless, the "customer" needs to visit the service authority physically 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, briefly One-Stop eGovernment. The dimensions bundling and virtualization of public services will be subsequently classified in this regard.

Reference Framework and Scenarios

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 bundling 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. Bundling of services takes place only partially, if at all. This means that customers usually need to individually visit the respective authorities providing partial services for the request in order to have the formalities managed, i.e. the degree of bundling of services is throughout low. In addition, the range of services is mainly function-oriented instead of customer/product-oriented, i.e. products may have to be defined prior to the bundling of services. Online availability of the offered services 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 bundling of services. An example for 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 citizens). The degree of bundling of services is high. This scenario, however, requires that the customers visit a central location in order to have their requests managed. 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 bundling of services. The degree of bundling of services 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 to have their requests managed, but are able to initiate and handle the required communication and applications electronically to a large extent. Examples for 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 bundling of services noticeable and useful for the customer to a large extent. The degree of bundling of services is thus high. In addition, this bundling of services 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 bend point in the upper right corner stands for a public organization comprising all services in customer-oriented bundles, which can be completely managed online. The fourth square thus illustrates a scenario in which the services can be used both location-bound and independently of location.

Strategies

In accordance with the described reference framework, there are various possible strategies in the public administrative authorities against the background of the implementation of the EU services directive. In doing so, the reference framework allows for public administrative authorities to be assigned to a starting square during the development of their specific strategy 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 over Scenario II to Scenario IV,
2. Transition from Scenario I over Scenario III to Scenario IV,
3. Transition from Scenario I directly to Scenario IV.

In German speaking countries, there are predominantly (virtual) administrative organizations (Scenario I and III) for enterprise-related services at municipal level at present; 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 strategy approach to the bundling of public services developed. In order to demonstrate the second migration path, the concept of a "One-Stop eGovernment for enterprises" is presented in terms of the application case of the state capital of Düsseldorf and the strategy approach to an enterprise-related bundling of services substantiated.

Case study „State capital of Düsseldorf"

Düsseldorf, capital of the state Nordrhein-Westfalen in Germany, has about 580,000 inhabitants. The public administrative authorities of the city of Düsseldorf are employing about 9,100 employees, distributed over 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.

Strategic Approach

In the described reference framework (2.1), the starting square referring to the enterprise-related services of the state capital of Düsseldorf is located in the upper left area (Scenario III). All authorities have local city portals, via which the services can be initiated and managed in various forms. In view of the EU services directive, the city of Düsseldorf is requested to rearrange its product and process organization, particularly as the support of enterprise-related activities becomes increasingly an essential position factor in the international competition (Becker et al.,

2003, p.2). The subsequent figure positions the enterprise-related services of the state capital of Düsseldorf within the established reference framework. The starting circle illustrates the actual status, the dashed target circle the desired development objective and the adjacent dashed circle at the right the further development potentials.
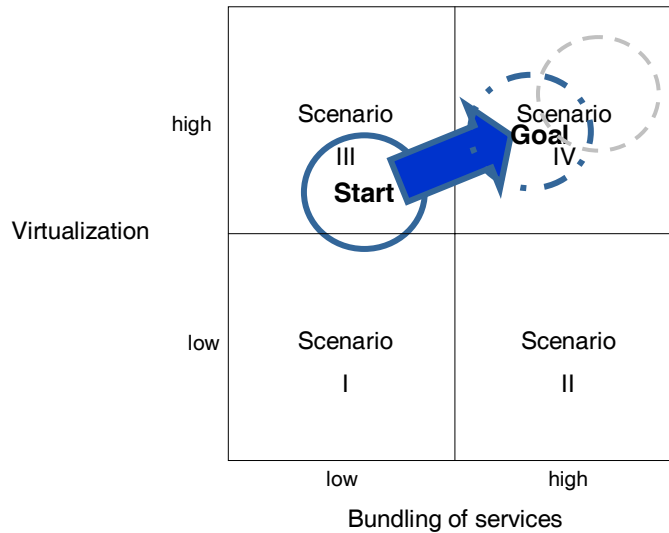

Figure 2: One-Stop eGovernment – State capital of Düsseldorf

The objective is to offer enterprises one-stop administrative services, especially in case of across-authority processes, to a higher extent (Shackleton & Dawson, 2007, p.2). 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 bundling of services shall be increased to the same extent so that an advanced bundling of services is achieved on the way to a virtual service center as final goal.

Approach

In Düsseldorf, about 99% of the enterprises have less than 500 employees and can be considered as small or medium-sized enterprises, following the definition (SMEs) of the German Institute for Market Research in Bonn (IMF, 2008); in Düsseldorf, these are about 38,000 enterprises. The classification according to the SME definition of the EU Commission (for small and medium-sized enterprises) (COM, 2003), which draws the line at 249 employees, does not reduce this value significantly and has no influence on the selected strategy approach. If the fact is additionally considered that the implementation of the EU services directive becomes increasingly important with decreasing size of the enterprise, the target group of the state capital of Düsseldorf is predominantly medium-sized enterprises. The higher objective of the state capital of Düsseldorf is to make the city even more attractive for enterprises in terms of their competitiveness with long-lasting effect. This shall be achieved by making the enterprise-related offers and services of the city even easier to access for enterprises, in terms of a One-Stop eGovernment.

Situations of Enterprises

Frequently occurring situations in the lives of people can be referred to as "lifecycle", which describe the needs in a certain situation (Bleek, 2002, p.77). Examples for this are move, marriage, birth or death (Traunmüller, 2005, p.9). One concept on the basis of "situations of life" classifies relevant processes occurring on the account of the situation (Wimmer, 2002, p.7). From the

customer's point of view, public services shall be aggregated in a way that product and service bundles are developed, reflecting "situations of life" (KGV, 2002, p.1). This requires corresponding processes in the administrative authorities (integrated product and process models).

Following the definition of "situations of life" in case of citizen-related services, frequently occurring situations in enterprises can be referred to as "situations of enterprises" (Wolf & Krcmar, 2006, p.7). All offers have in common that they comprise situations of enterprises based on the concept of the "life cycle" of an enterprise [comp. BVA, 2008; DIH, 2008; EMS, 2008) so that the phases (1) foundation/settlement, (2) establishment/ growth, (3) crisis/restructuring and (4) liquidation/succession can be defined as situations of enterprises (LHD, 2008).

The classification of situations of enterprises according to these four phases allows for all situations of enterprises to be assigned to one of these four phases; at the beginning, the enterprise is founded or, in case of an existing enterprise, resettled. After successful market entry, the first phase is followed by the phase of "establishment" and further development/improvement of the business activity, referred to as "growth". Additional phases of the "life cycle" of an enterprise are a possible "crisis" or "restructuring" of the business activity, which may show itself by focusing on core business areas. At the end of the "life cycle" of an enterprise, the "liquidation" or a manager change ("succession") is carried out.

Bundling of Public Services

In view of the different situations of enterprises, the question arises how public administrative services shall adapt their services to the enterprises' individual needs. This shall be achieved by forming useful (partial) bundles of services from the mass of public services; these can be compiled to service packages adapted to individual needs.

Especially in administrative authorities exhibiting a multiple of functional organizational structures, services cannot be obtained in coherent, customer-oriented, one-stop service bundles. This results in the fact that the customer may have to individually visit a great number of involved administrative sub-offices of this organization to have his request managed. The same applies to the field of forms, in case the functional organization is followed by forms.

By forming target group specific service bundles, the range of services will be aimed at the user group to a larger extent. Possible areas of bundling are: information, consultation and transaction (BMI, 2006b, p.8), whereby the term "consultation" lays more emphasis on the aspect of service orientation compared to the term "communication" and is thus prioritized:

- **Area of bundling "information"**
  The area of bundling "information" comprises service bundles covering typical inquiry situations from the field of information, for example on the position (sector profile, infrastructure, economic power), the foundation of an enterprise (requirements, procedure of registry of a business) or a business table, which, similar to a rental table for living spaces, provides an overview of the price level of storage, office and production areas. In doing so, the information shall be made available in adequate form and in several languages.

- **Area of bundling "consultation"**
  The area of bundling "consultation" allows for the compilation of frequently occurring consultation requests into demand-oriented consultation packages. Against the background of the limits of electronic provision of enterprise-related services, this area of bundling forms a significant aspect of the bundling of services for enterprises. For example, the consultation area of "internationalization" represents an important core competence of municipalities with international orientation. Additional possible consultation areas: support of start-up enterprises, consultation on development programs or crisis and succession consulting.

- **Area of bundling "transaction"**
  The area of bundling "transaction" includes typical enterprise-related process and form bundles. The demand in bundling of public services especially shows itself in this area.

Forms and procedures functionally subdivided due to the functional organization of authorities usually do not cover a complete service process. There is considerable development and optimization potential in this area. The objective is to offer enterprises all required processes and formalities in coherent bundles.

Bundling of Services According to Situations of Enterprises

In order to adapt the service orientation to the enterprises' needs to a large extent during the use of public services, a strategy approach of linking the aspect of classification according to situations of enterprises and the described bundling of services to each other is pursued:
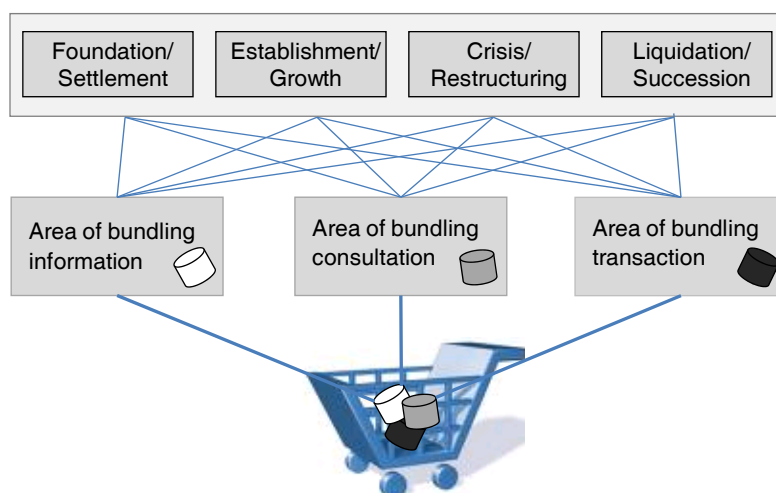

Figure 3: Bundling of services according to situations of enterprises

This strategy approach combines two central aspects:

- On one hand, it allows for a structured and customer-oriented access to the enterprise-related public services by allowing the enterprises to select one of the four situations of enterprises based on the four "life cycles" of an enterprise.
- On the other hand, the enterprises are provided with enterprise-related public service bundles adapted to their individual needs.

The formation and representation of appropriate (partial) service bundles of public services allows for the enterprises to obtain individual service bundles adapted to their respective situations by targeted combination of partial service bundles. Due to this strategy approach, public administrative authorities obtain a framework of tasks, which on the one hand includes the diversity of enterprise situations but largely dissolves it on the other hand by offering situation-related access and the possibility to form individual service bundles.

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 represents a central component here, which helps the city to focus its online organization on the target group. At the same time, the external and internal perspectives shall be integrated. "The problems of lacking consideration of the internal administration in case of portal-dominated eGovernment projects (Wimmer, 2005, p.96) have also been recognized in Düsseldorf and will be followed up in subsequent projects.

Enterprise Portal

In order to expand the range of online services for the enterprises of the city, an enterprise portal has been established. With this portal, Düsseldorf especially pursues the objective to provide access to all enterprise-relevant services of the city "in just one click" (Wimmer & Traunmüller, 2002, p.1), e.g. announcements on tenders, online forms or central contact persons for enterprise-related services. In order to ensure demand-oriented support of the enterprises, the range of services in the portal will be constantly adapted to the economic progress (Fisher et al., 2005, p.8;). The subsequent figure shows the start page of the portal for enterprises in Düsseldorf:

Figure 4: *Enterprise portal of Düsseldorf*

Bundling of Partial Services

The demand in and the necessity of public services are directly associated with the boundary conditions and the actual situation of the enterprise at the time of contacting the public administrative authorities or using a public service. The ability of administrative authorities to provide the appropriate service package for every individual situation of an enterprise is thus excluded.

The bundling of public services into useful enterprise-related partial service bundles helps to overcome this dilemma. Analogously to "concepts of life situations" in citizen portals, a distinction is made in Düsseldorf between the enterprise situations (1) foundation, (2) establishment/growth, (3) crisis and (4) succession. The subsequent figure illustrates the selected differentiation on the basis of an online extract of the portal of Düsseldorf:

Figure 5: Lifecycle stages Düsseldorf

According to the illustration, the phase-related services are further subdivided into partial service bundles within the selected enterprise situations. These will be constantly adapted to the economic progress, having the objective of providing useful partial service bundles to enterprises, in spite of the diversity of their situations. In addition, eGovernment products having their focus only on pure "life situation models" can be counteracted, as in certain situations, enterprises do not only request for public services but also need an integrated combination of services of the public administrative authorities and the private sector enterprise (Güngöz, 2003, p.2). Further differentiation with respect to sector segmentation, consideration of sector specific characteristics and administrative levels/cross-regional linking of public services (Zalisova, 2007, p.10) is subject to additional research.

Points of Single Contact

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 bundling and coordinating functions during cross-authority and cross-sector administrative processes. In addition, they are competent partners for enterprises, especially during permission procedures.

The approach of Düsseldorf is supplemented by employees of the Authority for Economic Promotion, who, acting in individual cases as so-called guides, accompany the enterprises to appointments and advice them during the preparation phase. Service lines have been additionally set up in all enterprise-related authorities, via which telephone requests can be directly processed or contacts directly mediated. All contact information is directly accessible via the portal.

Internal Tracking

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. There is a service promise of two days towards the requesting enterprises, within which their requests are processed or an initial reaction with information on the specific contact partner and the further procedure takes place.

Every request is supported personally and technically via what is referred to as "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.

Summary and Prospects

The article deals with the differentiation criteria virtualization and bundling 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 degree of virtualization of public services is already high in many places; nevertheless, this development with respect to the bundling of services is still in the initial phase. Starting from this basis, a strategy approach to the bundling of public services will be developed. Due to the formation of service bundles, the services will be increasingly adapted to the needs of the user group enterprises. The strategy approach to enterprise-related bundling of services will be substantiated in terms of the case study of a "One-Stop eGovernment for Sme´s" in the state capital of Düsseldorf.

The introduction of an enterprise portal will significantly increase both the degree of virtualization and the bundling of services in Düsseldorf. Analogously to "lifecycle concepts" in citizen portals, a distinction is made in Düsseldorf between the enterprise situations (1) foundation, (2) establishment/growth, (3) crisis and (4) succession. 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 bundles with regard to the procedures by electronic means. The establishment of points of single contact in Düsseldorf additionally forms the basis for the delegation of the function of the points of single contact in accordance with the EU services directive. Furthermore, the services for local small and medium-sized enterprises will be constantly adapted to the economic progress.

Present possibilities of IT allow for a multitude of further supporting developments in terms of a "One-Stop eGovernment for enterprises"; fields of development such as form management systems (within the framework of which the cooperation with economics is considered as the fastest growing field (Becker et al., 2006, p.14), process optimization or application status tracking/dialogue (in terms of an external tracking system and as the basis for common value added chains (Millard, 2007, p.13) have future potential.

To what extent these will become fields of development in Düsseldorf as well is subject to further planning steps. The focus is currently on the enterprise-related bundling of public services, further differentiation with respect to sector segmentation and sector specific characteristic as the basis for increased orientation to the target group enterprises on the way to the implementation of the EU services directive.

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