# Alleviating SMEs' Administrative Burdens: The Rural Inclusion Initiative

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**Abstract.** Reducing the administrative burdens of businesses and citizens comprises a major area of e-government benefit. Reducing SMEs' efforts to find information on particular public services is a challenge for the European Union. This aim can be achieved through semantic services along with an innovative training approach for public administration employees and SMEs. The paper presents the preliminary results of the administrative burden measurement for rural SMEs in the Spanish region of La Rioja, as well as planning and tools for collaborative training of public authorities in using three platforms (eGovTube, RuralObservatory 2.0, and eGovPortal) for the administrative simplification of public services in European rural regions.

**Keywords:** Electronic government, rural SMEs, administrative burdens, learning objects, collaborative training.

## 1 Introduction

Regulation encumbers citizens and businesses with costs that are connected with the following actions: finding which regulations are needed for compliance, understanding regulation and finding ways to comply with it, and complying with regulation [1]. Administrative burdens are costs incurred by businesses for collecting information for their action or production so as to meet legal obligations. With Small and Medium Enterprises (SMEs) comprising the backbone of European economy, European Union's (EU) concern on the reduction of their administrative burdens has been increased over the last decade. Administrative burdens comprise a significant business constraint, particularly today that SMEs have fewer resources and need to invest to remain competitive [2].

It is a fact that among others, SMEs' administrative burdens are closely related with their efforts to find information on particular public services. A great part of this information regards the informational phase, namely things that an SME should know before executing a particular public service. For instance, the informational phase concerns the SME's eligibility to perform a service; the Public Authorities (PAs) that are responsible for it; and what kind of documents the SME should adduce so as to apply for it. The process of searching for and retrieving this knowledge, either

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performed by the SME or by an expert (e.g. accountant, lawyer) on the SME's behalf, costs in terms of time and money. In many cases, this process can be repeated several times throughout a year, due to change of laws and regulations or in need of clarifications [3]. It has been estimated that SMEs spend on average 27,500 USD per year so as to comply with tax, employment and environmental regulations, which is about 4% of their annual turnover and incurs a cost of 4,000 USD per employee [1].

Already, various projects and initiatives from various countries have aimed at measuring and reducing administrative burdens. Such examples include: the "Measurement Project" in the UK for measuring the administrative burdens of businesses in complying with tax regulation; the "Bureaucracy Reduction and Better Regulation" program in Germany for reducing the administrative burdens of SMEs by 25% by the end of 2011; and the new initiative by EURinSPECT (www. eurinspect.eu) for the elimination of obstacles of cross-border procedures in the healthcare sector and the cross-border collaboration between hospitals in the Netherlands, Belgium and Germany [2].

In this context, "Rural-Inclusion (RI): e-Government Lowering Administrative Burdens for Rural Businesses" (www.rural-inclusion.eu) a project supported by the European Commission under the Competitiveness and Innovation Framework Programme has been launched. It aims at deploying an innovative infrastructure (e.g. software, models, and services) that will facilitate the offering of semantic Web services by PAs in rural areas for the informational phase. In particular, RI aims at addressing PAs' longstanding challenges, such as easing the discovery of public services by users-rural SMEs, personalizing the service that the user needs to have access to, providing all necessary information for the execution of the particular service and checking the eligibility of the user for receiving the service. Also, RI proposes a collaborative training for helping PAs in implementing e-government services for supporting the informational phase.

For succeeding these objectives, RI adopts, adapts, and deploys in a rural setting the Service Oriented Architecture (SOA) paradigm, implemented through state-ofthe-art semantic Web technology and supported by rigorous and reusable public administration domain analysis and modelling. In the context of RI, the administrative burdens imposed to businesses when performing particular public services are alleviated through the implementation of an online dialogue of the public services.

The users of the RI services are in five European rural regions, rural Spain, the Greek island of Chios, rural Latvia, rural France and overseas, in the region of Martinique. At regional/national level, the directly involved user groups will be rural SMEs, PAs, and e-government service technology providers and innovators.

Thus, the scope of the paper is to present the RI approach for the administrative burden measurement, as well as planning and tools for PAs' training in using three platforms for the administrative simplification of public services. Therefore, the structure of the paper is as follows: in the next section the initial measurement of administrative burdens for the case of La Rioja SMEs is presented. In section 3, the approach for training PAs is apposed. Lastly, some conclusions are given.

## 2 Measuring Administrative Burdens of Spanish SMEs

Various initiatives in the EU and internationally for measuring and reducing the administrative burdens have been proposed. Nowadays, there is a continuously increasing interest and effort towards the particular issue by different bodies (public authorities, private organizations etc.) in terms of level of administration, aims and business sector, and models and tools. The most well know tool is the Standard Cost Model (SCM) (www.administrative-burdens.com). It enables the assessment of the cost of "red tape" and identification of the benefits by administrative cost reduction. It produces transparent measurements, which construct an essential tool against administrative burdens and complex legislation. It must be noted that the SCM has already been widely used globally, as well as by many EU countries. In the context of RI project the SCM has also been used.

In the first stage of the RI initiative, the administrative burdens measurement concerns "Measuring the Cost of Administrative Activities". It is twofold:

- Firstly, it depicts the profile of rural SMEs regarding the following: (a) ICT literacy (use of personal computers and the Internet), (b) ways of transacting with public agencies and (c) knowledge and use of e-government services at national and European level;
- Secondly, it measures the cost of all administrative activities performed by rural SMEs in order to comply with the obligations of the specific public services that have been selected to be measured.

It must be noted that this measurement will provide strong evidence on the significance of information cost of SMEs relevantly to the total cost of the public service. In order to fulfil the requirements of the measurement a specialized questionnaire has been prepared. Below, the questionnaire analysis for the case of La Rioja is presented and particularly for the "Provision of grant from SRE to unemployed persons for starting up a business" public service.

Servicio Riojano de Empleo (SRE) provides a subsidy to facilitate the financial capacity of unemployed people in becoming self-employed workers. Although the Spanish government provides various electronic services regarding the creation of a new business process (e.g. application submission, guidelines for filling out the application), citizens who want to start up a new business are not familiar with the different legal business types that exist and thus they are not able to choose among them [4].

The measurement has been conducted during the first semester of 2010. The sample consisted of thirteen SMEs, namely one medium, eleven small and one micro. They have been represented by owners, managers and internal professionals. Their line of business regards legal advice, tax and labour services, associationism, driving school, research and development, trade of building materials, health, dental clinic, technological centre, consulting and computer services, audiovisual production, constructions and development of management software. All SMEs acquire personal

computers and Internet connection, used daily for searching for information, communicating and offering product information and possibilities for ordering them.

Face to face meetings, the Internet, the email and telephone are the main transaction ways with public agencies. More than 30% have some knowledge regarding the existence of online public services for SMEs at European level, namely services for receiving grants. Concerning national services, they are aware of many, such as receiving grants, tax and social security services, services provided by the Ministries of Science and Innovation, Industry, Tourism and Commerce availability, as well as training courses. Regarding the use of online public services, almost 40% uses some of them daily.

In order to receive grants from the SRE the following administrative activities have to be performed: (a) Delivery of Taxes forms; (b) Collection of forms from the Social Security; (c) Payment of fees; (d) Delivery of forms to Social Security; (e) Collection of documentation for new workplace; (f) Filling in forms; (g) Submission of forms; (h) Issuance of health permits; (i) Procurement of supplies; (j) Issuance of a license; and (k) Starting up of activity.

Regarding the difficulty of the collection, preparation and provision of information for the service, it is considered as moderate (60%). The main administrative burdens for collecting, preparing and providing information are the following:

- The number of different entities that must be visited;
- The difficulty in harvesting and completing the forms;
- The collection of information and reading of guidelines, since the language used is difficult to understand and identify what is eligible or not.

SMEs believe that if someone wants to speed up the process, it is necessary that their subcontracted counsellor has good relationship with the local economic development agency. The most burdensome activity is filling in the forms. The SMEs do not use the required information in another context. SMEs believe that they can reduce the costs by reducing the administrative processes and performing activities through the Internet. The relevant regulation is complicated. The particular service could be simplified by creating an electronic process through which someone can find specific help or by enabling the completion of the public service through the SRE portal.

### 3 Training Public Agency Employees

PAs are the responsible bodies for serving citizens' and businesses' needs regarding their transactions with government. In order to succeed this, PA employees have to be trained. RI offers an innovative training approach for training PA employees and rural SME personnel so that the RI services can be effectively introduced in rural settings.

The RI initiative provides formal training and activities through a multistage process developed as a series of living labs/workshops where PA employees are trained and guided in an experiential learning process that will be fostered and sustained by a collaborative learning experience through the use of the tools provided by the project. The main target participants of the training sessions are representatives of the local authorities and public service providers, who can also act as facilitators/observers. In this context, three main platforms will be used, namely the eGovTube, the Rural Observatory 2.0 and the semantic eGovPortal, creating an incubator (Fig. 1) described as follows:

- eGoveTube is a collaborative Web 2.0-oriented platform that aims at supporting
  PAs in sharing information and experiences, identifying innovative services and
  developing users' interest for them. Also, it supports users in sharing and
  exchanging ideas and experiences and using of innovative e-government
  supportive technology introduced through video communication, community and
  knowledge assets network(s) visualisation, rich profiling and other tools [5].
  eGovTube will be used as core driver for sustaining the overall process, not only
  by giving room to the delivery of training content, but also by giving voice to all
  participants to share their ideas and experiences, so that the innovation diffusion
  process will be constantly challenged and assessed. This platform is able to deliver
  formal training content as well as informal, actionable learning-based activities;
- Rural Observatory 2.0 is an innovative sophisticated Web-based environment that will facilitate information retrieval, access, usage and exploitation of e-government services and relevant digital educational content [6], [7]. The use of the Rural Observatory 2.0 tool will allow to store and deliver more traditional training content for various topics;
- eGovPortal is a platform that offers an ontology-based structured dialogue for driving users in eliciting specific information for performing a public service. It offers the main bundle of semantic e-government services and undertakes the responsibility of alleviating the administrative burden for rural SMEs, in regard to their transactions with local authorities and regional public authorities.



Fig. 1. The Rural Inclusion incubator

Two workshop sessions per PA will take place in 2011. Further workshops will be organized in order to address specific training needs that may emerge from the feedback and the input of the RI community posted in the eGovTube. The objectives of the workshops are to train the PAs in: (a) documenting and modelling public services using the RI methodology and tools; (b) using and exploiting the

opportunities of eGovTube; (c) using and exploiting the opportunities of RuralObservatory 2.0; and (d) using and exploiting the opportunities of eGovPortal.

The organized workshops will allow to provide direct tutoring on the RI tools that will foster the reduction of administrative burdens related to public services and to gather insights from direct interaction from targeted users by the means of discussions and of hands-on sessions. It also concerns testing products and services in real time and real life environments, thus helping users to encounter, understand and solve problems, , and to detect the usable features that have to be promoted. Observation of the behaviour of the users will provide information about how to improve the usability of the tools and the users' ICT skills. Recommendations, thus, will be based in real life experiences of the target group, and therefore they will be context based and usable.

Training content is a very vital means so as to disseminate the RI knowledge to interested stakeholders. The training content will be used in the training workshop sessions that will be attended by the PA employees in the context of the RI project. In total, 21 learning objects/ activities have been determined. A learning object is any entity, digital or non-digital, that may be used for learning, education or training [8], [9]. The learning objects have been analyzed by a set of characteristics, which have been classified in three main categories, namely content characteristics, media type and format and usability and availability, as described below [3]:

#### (i) Content characteristics

- Subject coverage: The most important identification in regard to the training content is the different topics it covers. There are four main subjects, namely Public Service Modelling, Using eGovTube, Using RuralObservatory 2.0, and Using eGovPortal.
- Type: A learning object can be of one or more of the following types, namely application, assessment, case study, demonstration, educational, glossary, guide and lecture (course/seminar).
- Content use: In regard to the potential use of the content, two possible uses have been identified, namely informational use and use for training purposes.
- Quality procedures: An approach for evaluation of the content quality, including structured questionnaires and interviews.

#### (ii) Media type and format

- Format: Learning objects are in various formats (e.g. videos, PowerPoint presentations, and Word documents) so as to offer a variety of means and attract more participants.
- Size: The analysis of content in respect to the storage capabilities revealed that the total of content does not have excessive requirements for storage.

#### (iii) Usability and availability

• Ownership: For every learning resource the owner and creator/author have been identified.

The objective of training PAs on documenting and modelling public services using the RI methodology and tools has been achieved through the creation of fifteen learning objects. Three learning objects have been created so as to support the eGovTube tool. Also, two and one learning objects have been created for exploiting the possibilities of RuralObservatory 2.0 and eGovPortal correspondingly.

## 4 Conclusions

In the context of business to government innovations, current EU initiatives aim at building a strong European economic area with simplified government transactions. Although, various efforts and e-government initiatives at national/European level exist to enable electronic communication/ transactions between SMEs and PAs, complexity still exists.

In this light, the reduction of SMEs' administrative burdens is one of the issues to be studied. SMEs devote many resources and time to find information before executing a particular public service. The administrative burdens incurred by this process deprive SMEs of their ability to make more investments and enhance their dexterity. RI tries to address the problem of the alleviation of administrative burdens by easing the discovery of public services by rural SMEs, personalizing the service and providing all necessary information for its execution. Also, RI provides a collaborative training for helping PAs in implementing e-government services and rural SMEs in using them. Thus, RI boosts a transformational e-government dynamic by achieving a change in culture on how e-government services are designed by PAs and accessed by rural SMEs.

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