Converting Online Public Legal Information into Knowledge: *ABC del Diritto*, an Italian e-Government Citizen-oriented Service

**ROBERTA NANNUCCI, MARIA ANGELA BIASIO**


1. **INTRODUCTION. e-GOVERNMENT CHALLENGE**

E-Government is the use of information and communication technologies in public administration - combined with organisational change and new skills - to improve public services and democratic processes and to strengthen support to public policies. E-Government is a way for public administration to become more open and transparent, and to reinforce democratic participation; more service-oriented, providing personalised and inclusive services to each citizen.

E-Government implies both ICTs and human resources: whereas governments are suppliers of the e-Government system, end-users/citizens are its customers. So, the implementation of e-Government, while implying the modernization of procedures and structures within PA organizations (that is e-Administration), regards also the change of procedures and modalities in which citizens and PA relate each other (that is e-Democracy), and all together aim at achieving a new way of ruling public matters, that is a new Governance or e-Governance.

Therefore, e-Government with all its strategic outlined roles becomes an essential step in the development process of a new governance form as hoped and promoted by the European Union, whereas it involves not only the improvement of services quality, but mainly makes users more...
aware of public activities in progress and favours their active participation as citizens.

Generally speaking the specific goals of e-Government services should be to enhance citizens awareness and to convert available information into achievable knowledge.

The understanding of people who will be using e-Government services is therefore critical for creating good added-value services.

This should extend to the way they understand computers and the internet, the ways in which they think about and carry out tasks, and the context in which they will do this. Understanding, however, is one thing, an effective use is something else. Even if a service might be created to be useful to citizens but does not take into account how it can be utilized by them, the constraints on their attention, their level of technical ability, the difficulty of accessing it and finding relevant data, then it is almost unlikely that it will be used at all. This type of service is of little interest for citizens.

Presently ABC for the law citizen/user target is mainly represented by those categories able to retrieve online information and to use possibilities offered by Information Technologies techniques in a proper way. This happens with those persons who have a sufficient digital literacy background. In the Italian panorama this is true for some categories of young professionals such as academics, lawyers, accounters, administrators and not really for the common citizen. Nevertheless, as digital literacy is increasingly being diffused to the general public, access to online services such as ABC are growing as it is possible to verify by system monitoring.

Finally, also the Public Sector Information Directive Directive 2003/98/EC on the re-use of public sector information adopted by the European Parliament and by the Council on 17 November 2003 was designed to make it easier for content producers to use and add value to information produced by the public sector, both providing useful content for the development of the Information Society and making public sector content more accessible to more people.

2. Objectives. Benefits from e-Government Citizen-oriented Services: From Information to Knowledge

This paper aims at demonstrating that citizen-oriented services such as ABC for the Law are able to facilitate access of citizens to the legal
information offered by public administrations converting information into real knowledge using the possibilities arising from ICTs. Specifically the methodology applied for building up the system focuses the attention on the identification of those legal concepts involved in the legislation on the net search and therefore to be acquired by the user in order to understand the result. So that $ABC$ can also be considered a sort of tutorial guiding the user in his searching and making him understand the data he finds in a more conscious way.

Offering additional information about other related sources available online and widens the user research strategies and increases his knowledge background.

These is also possible as $ABC$ considers all legal concepts involved when searching for legislation on the net.

2.1. Information Dissemination State of the Art

Through cyberspace people are presently involved in ways never envisioned before: they are often overwhelmed by information which is frequently not exhaustively clear as to contents and language. For these reasons and for other technical barriers it is evident that information itself is not yet knowledge. Citizens need places where information can be transformed into knowledge, that is shared understanding. Specifically, recent research into e-Government practices and applications illustrates that the creation of specific tools for sharing and developing real knowledge is necessary for enhancing citizens involvement at least in this early stage of e-Government implementations, when the access to a large spectrum of information is simply preferred to a concrete communication between citizens and PAs.

Information may become knowledge only when great attention is given to key elements such as contents and actors of the communication process and practical solutions are identified and elaborated in relation to the specific field of interest (Law, Economy, Social, Health etc). Reaching these results requires practical groundwork, starting small with innovations, learning from experience, sharing of best practice and finding scalable solutions.

As to legal knowledge the dissemination of official public information and documents is becoming increasingly important as they are the very
nature pre-eminent examples of public sector information, which relies mostly on universal access, in the sense that access should be freely available. Nevertheless, at present governments are not yet sufficiently open and transparent to induce citizens involvement. Information is often represented in the net in a way which is unclearly organized both for expert and non expert users, as the majority of citizens are. Furthermore dealing with public information and data means to be in touch with qualified sources mostly regarding domains not easily comprehensible by common users. With the aim to mediate between PA features and citizens’ awareness it seems therefore very adequate to adopt specialized knowledge-oriented support tools, such as information system guidelines, structured search engines, guided navigation paths, specialized glossaries, user-oriented illustrative and recapitulatory tables for specific domains such as law, economy and other disciplines which may contribute to enhance citizens’ capability to access online information.

At present there are many experimental applications carried out in several European countries and much discussion is held on which are the best means for transforming information into knowledge, and which structure and format they may have.

Another example can be considered Informiran.si, a system implemented in Slovenia aiming at aiding common users such as local citizens to fill legal documents online by means of a sort of electronic guide of relevant information necessary for achieving these goals.

2.2. ABC for the Law Framework

An important step of Italian e-Government strategies is represented by specific actions for enhancing the communication between govern-

---


ment and citizens. It is in this framework that *ABC for the Law* was built as a tool supporting citizens when accessing and consulting the NormeInRete portal.

NormeInRete (Legislation on the Net) Project, promoted by the Italian Authority for Information Technology in the Public Administration (AIPA) and the Ministry of Justice in collaboration with the Institute of Legal Information Theory and Techniques of the Italian National Research Council (ITTIG/CNR), aims at fulfilling the citizen's right to acquire knowledge about legislation and supports the Public Administration in managing the legislative documentation life cycle efficiently. More specifically, the NormeInRete Project (NiR) aims at improving accessibility to legislation by providing a unique access to Italian and European Union legal documents published on different websites through a specialised portal (www.nir.it).

The NormeInRete portal runs a search engine that operates uniformly on distributed data sources. Its full text search index is selectively built to detect only legislative documents. The achievement of a higher level of co-operation relies on the adoption of two standards, defined within the Project by ad hoc Working Groups in which major PAs and research institutions have taken part. The standards have been issued as AIPA technical standards and published as regulations in the Italian Official Journal. The definitions make use of Uniform Resource Names (URNs) (RFC 2141) and eXtensible Mark up Language (XML W3C Recommendation) standards.

*ABC for the Law* can be considered an example of a knowledge support tool through which citizens can access information in a more thorough way and at the same time learn about specific concepts or topics studying them deeply by using abilities incorporated in the system.

### 3. Methodology and Case Description. Managing Legal Knowledge in e-Government Citizen-oriented Services: *ABC for the Law*

Consulting and accessing legislation implies for citizens a basic legal background for orienting their search and needs. Citizens are not able to search for a Government decree if they do not know the difference between this kind of document and a law of the Parliament; moreover,
they cannot search for a law provision if they do not know that a law before being valid should be approved and, for the Italian system, edited in the Official Gazette. Furthermore, in the European context it is important for citizens to understand the relationship between the European Union and its member States in order to become aware of their European rights and duties. In order to expand the access not only to experts but also to common users it was considered essential to support the legislation search with a specifically built less complex tool facilitating the comprehension of legal basic concepts and guiding users towards their specific goals.

Taking into account recent research and surveys on stakeholders accessing online public information and their peculiarities (such as educational background, familiarity with legal concepts and capability to navigating in the net) two aspects were mainly to be faced for enlarging access to general public: the choice of relevant concepts and the way these were to be presented.

*ABC for the Law* (http://www.normeinrete.it/abc/html/indice.htm), is a specific tool recently elaborated in 2004 by ITTIG/CNR, the Ministry of Justice - Direzione generale per i Sistemi Informativi Automatizzati (DGSIA) and Centra Nazionale per l’Informatica nella Pubblica Amministrazione (CNIPA) with the aim of explaining some basic legal concepts, the knowledge of which seems useful for supporting citizens in their legislation search. When the Legislation on the Net portal was initially developed, it was mainly addressed to expert professionals such as lawyers, public officers and judges as the query forms were simply based on technical legislation references - such as law typology, official identification number, issue year and specific domain keywords - implying as such a thorough and deep knowledge of the Law.

Particularly, *ABC* contents was chosen with reference to the nature and purposes of the Legislation on the Net portal, that is access to public information requiring a good level of legal background. Basic legal concepts were identified and introduced for guaranteeing an elementary acquaintance of Constitutional law, Public law, Civil law, Criminal law, European and International law. The language employed in *ABC* was simplified and turned to render easily comprehensible the legal concepts included in the laws to be accessed as if the accessing citizens were represented by students of secondary schools. In fact a first draft of *ABC for the*
Law was distributed to a class of a technical secondary school where Law is taught as part of the curriculum and their feedback was taken into account.

The system content is subdivided into 8 parts, and these are articulated into other sub-sessions.

As indicated in the title page left side, the main parts are: Law definitions and classification; Law Sources; Italian Law sources; European Law sources; International Law sources; Italian Legal system; European Union Institutions; International organisations.

As to the way in which concepts are introduced, the attempt was made to indicate search paths to facilitate users’ involvement in transforming simple information into effective knowledge. The covered arguments, as indicated in the right side, are enriched with numerous hypertextual links of internal nature, identified with an [I], and of external nature, identified with an [E]. The former are conceived for enabling the user to deepen the knowledge he is searching for allowing him to move easily within the entire text and also to read through some relevant and more specific information or data; the latter were conceived to allow citizens to connect directly to the sources available in the net (i.e. institutional websites) for better understanding the concepts under consideration and for updating and contextualizing searched information.

The framework of the internal links is also enriched by some references identified by [T], that address the user to some illustrative tables on particularly complex topics or procedures, which represent an instrument of immediate perception and a key for a synthetic and simplified reading and comprehension.

A specialized legal Glossary allowing the consultation of short definitions of relevant or difficult terms and concepts dealing with the ABC domain has been added and may be consulted independently from the consultation of the complete system or by accessing the specific link identified with a [G] within the ABC contents.

From a technical point of view ABC was implemented by means of Macromedia Dreamweaver MX; pages are static but their layout is managed by templates according to the features of the hosting system.

From a first statistical analysis monitored by the Ministry of Justice on ABC for the Law after its recent insertion into the NIR portal (last six months), some issues come up which may deserve some attention.
The *ABC for the Law* system was accessed by a great number of users (about 280,000), especially soon after its electronic publication; in fact access was concentrated in January and February.

From a more detailed analysis of these accesses (based on automated lists of accesses to single pages by log files), the 15% of users navigated into *ABC* html pages concentrating especially on its two first sections (Law definitions and classification; Law Sources), on the illustrative tables and on the Glossary: it demonstrating - even if with small numbers - that citizens, when searching for legislation on the net, appreciated the support of simple explanations of too theoretical concepts as well as the aid of graphical and syntactical representations of complex procedures.

4. **Conclusions and Recommendations**

These first statistical results deriving from a brief monitoring of *ABC for the Law* accesses seem to show that the integration of online information systems with citizen-oriented support tools, specifically in legal domains significant in the relationship between citizens and public administration, is appreciated by users and capable of enriching their capacities. It seems therefore worthwhile to develop and adopt support tools capable of promoting a more active citizens involvement.

Access to online information/knowledge is currently difficult. Two aspects are to be underlined: from one side the language used is very often too technical and not oriented to non-expert citizens; from the other side the huge amount of data and information on the net - especially in institutional websites, implemented by public administration - are not transparent and this does not help citizens in their access to information and search of documents. In both cases the adoption of a support tool such as *ABC* may become a key challenge for Governments to organize, classify and manage information in a more rational way, and for citizens to be oriented in their navigation according to their specific needs, as, starting from a certain concept or word they may choose (as in *ABC*), they may be guided within the website contents through useful links and connections.

At the moment *ABC for the Law* is running in the NormeinRete portal as an additional service for citizens accessing the legislation on the Net portal. We are in the second implementation phase where a large survey
among different categories of ABC stakeholders is being done in order to assess ABC for the Law user satisfaction and to test the efficiency, usability (ease of use), utility, accessibility and quality of the service itself. Literature suggests many different types of usability evaluation methods basically divisible by three categories: inspection, inquiry and formal usability testing. Inspection is mainly based on experts evaluating and examining usability related aspect of the service; inquires involve users concretely experienced to evaluate their preferences, experiences and expectations with a site; formal usability testing can be conducted as an experiment in real situations. The goal is to validate the system and the user satisfaction using all these usability evaluation methods.

Further improvements can be already proposed towards this prospect such as the development and introduction into the system of proper metadata and artificial intelligence features. A significant step should be the creation of a specific ontology for structuring the complete legal content of ABC, facilitating in this way the logical approach to the system.

Aids such as ABC for the Law represent a valid means for converting information into knowledge and for educating citizens both in the use of technological tools and in their acquaintance of a basic legal approach favouring the awareness of their rights and of their possible actions in order to take active part to present and future social transformations. Within this framework it might be considered as a starting conceptual core to be submitted to an e-Learning platform in order to build a system which, after due experimentation, might become a tool far more able to induce knowledge; this would increase the application of the system to citizens lifelong learning and to public officers’ updating. Furthermore, the development of these types of tools represents also an innovative approach within the framework of European strategies aiming at building the Information Society. One major priority of the eEurope 2005 Action Plan is that all Europeans must have the opportunity to develop.

---


the skills necessary to participate in the Information Society and take 
advantage of the range of technologies and services available. Although 
many efforts have been devoted by national governments to digitalizing 
contents and services, there is still a long way from achieving those goals 
related most closely to social inclusion and the knowledge-based society. 

It is up to governments to further promote and elaborate proper 
services and tools; it is up to citizens to exploit implemented technological opportunities.\(^5\)

---