

How to Develop E-government: the Italian Case

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Abstract. The objective of the present paper is to analyse, longitudinally, the development of e-government in Italy from the middle of the '90s to the present. The author uses an approach based on the theory of governance which has been applied permitting the singling out of three different phases and main issues that an administrative renewal of this level involve. However it does not seem possible to make any evaluation about this evolution as it is at too early a developmental stage.

1 Introduction

E-government is a wide field. It concerns many disciplines both in the sphere of social sciences and natural sciences. Therefore this work is very partial. Its scope is to analyse, from a particular point of view, the evolution of this phenomenon, in Italy, from its beginnings in the middle of the '90s to the present.

This point of view is based on an interpretative grid related to the theory of governance as proposed by Kooiman (1999). At the base of his analysis are social interactions. These interactions are investigated through three different levels of analysis. The first one considers functional aspects: interactions that regard procedures and regulations. The second level refers to the structures in which they take place or, in other words, the institutional setting. The third level concerns the social acceptability and the legitimacy of interactions.

This three level analysis will be applied to e-government development in Italy, which has been subdivided into three phases. The phase of community networks and the first municipalities that decided to support this phenomenon, the spontaneous phase in which the majority of governmental organizations, at all levels and autonomously, built web sites, and the phase of policies in which, at the national and regional level, plans have been introduced to regulate e-government development. These three phases were then analysed according to Kooiman's grid. From this analysis emerges, in a comprehensive way, the main determinants of each phase. However it does not seem possible to make any evaluation about this evolution. We are at too early a developmental stage and for this proposal a comparative analysis with other countries at a similar level of advancement would be more useful. This notwithstanding, taking into consideration social acceptability and legitimacy of e-government interventions sheds light on key issues for the future.

2 The Concept of Governance

Kooiman's work (1999) will be taken as point of reference and his interpretation of governance will take us to e-government analysis. This approach is in the wake of the general theory of a system (Boulding, 1956, Ashby, 1958). Therefore governance is seen as an entity formed by constituents that are interrelated with each other. That is, each part is dependent and yet, at the same time, affects other parts. This analysis focuses just on interactions in order to examine main characteristics of social-political systems.

Interactions that steer us in this study because of their *diversity*, *dynamics* and *complexity*. *Diversity* suggest the idea that governance has to face the multitude, often of different nature, of individuals and organizations that are involved in the public sphere. *Dynamics* emerge as the result of the tensions between change and conservation, between special interests and common interests and between systems and their environment. Finally *complexity* is the consequence of the different nature, form and intensity of interactions.

In this intricacy how is it possible to put order and orientate ourselves in order to understand the nature of governance? A distinction between the *intentional level* and the *structural level* of interactions can be useful for this proposal. In fact the intentional level is formed by images, instruments and action conditions. That is, a conception where the system came from, where the system is and where it needs to be (images); a set of tools that permits the shift to the desired position (instruments) and support and consensus necessary for implementing the required tools (action condition). However this *intentional level* is strictly related to the *structural level* that is represented by culture, resources and power (Kooiman and Ass., 1997). In other words, images, instruments and action conditions are embedded in the *structural level* and each intervention into the system is the combined effect of both these two levels of interactions.

To sum up, *diversity*, *dynamics* and *complexity* concern the modalities of interactions and the configurations through which they take place. On the other hand the *intentional level* and the *structural level* regard more the foundation, the logic of interactions and what gives them a possible shared meaning.

The next step is to give a comprehensive analysis to these two aspects: the modalities of interactions (*diversity*, *dynamics* and *complexity*) and the logic of interactions (the *intentional level* and the *structural level*). And this is possible recurring to the so called governing *orders* and governing *modes*.

What are governing *orders*? What are governing *modes*? Let's start from the former. Governing *orders* represent, mainly, activities executed by actors involved. It means everything concerns the mission of the system taken into consideration. From the direct supply of a service, for example, to the strategy and values on which it is based. On the other hand, governing *modes* do not regard activities but actors. Namely, who and in which way activities are implemented.

Governing *orders* are subdivided into first-order governing, second-order governing and meta-governance whereas governing *modes* in self-governing, co-governing and hierarchical governing.

3 Governing *Orders* and Governing *Modes*

The examination of governing *orders* starts from the first-order governing. This order regards day-to-day activities, routines and procedures in concrete governing situations employed for solving problems or taking opportunities. Concerning opportunities, Kooiman (1999) maintains that the challenge of present-day societies is not only the problem-solving one but also about creating collective opportunities. The private sector and market, that used to be considered the main forces for creating opportunities, are not sufficient anymore whereas a combination of private and public seems more effective.

Both the problem-solving question and the opportunity creation question emerge from the so-called modalities of interactions (*diversity*, *dynamics* and *complexity*). The former comes out because of tensions in the in the social-political system then necessitating the intervention of the *intentional level* and the *structural level*. The latter, even though it is a product of *diversity*, *dynamics* and *complexity* too, requires what we have called images at the *intentional level*. Only images can make sense of the context and start how to intervene into it through instruments and action conditions (the other two elements of the *intentional level*).

Therefore the first-order governing, as concerning common activities, is mainly related to the modalities of interactions (*diversity*, *dynamics* and *complexity*) and only in the case of the opportunity creation it becomes fundamental the role of images (an element of the *intentional level*). This is a phase in which substantial changes are not required, both in the *intentional level* and the *structural level* (culture, resources and power), in order to intervene in the socio-political system (see Table 1).

What does happen when the performance of common activities becomes out-date, dysfunctional, and not effective anymore? It is this range of questions that introduces the second-order governing. This order that does not concern anymore day-to-day activities or problem-solving and opportunity creation but the institutional setting in which these activities take place. To put it differently, it regards the balance between needs and capacities of a social-political system. Therefore, what kind of intervention do the combination of the *intentional level* and *structural level* support? Does it fit to problems and opportunities at stake? Answering these questions has to do with the second-order governing.

It is at this point that the governing *modes* question emerges. Governing *modes* are nothing but models through which interactions take place or, in other words, how these interactions are institutionalised and in which type of institutions. Kooiman singles out three of these modes: self-governing, co-governing and hierarchical governing and is intuitive to recognize how this subdivision refers to the new institutional economics (Williamson, 1975, Ouchi, 1980) (See Table 1).

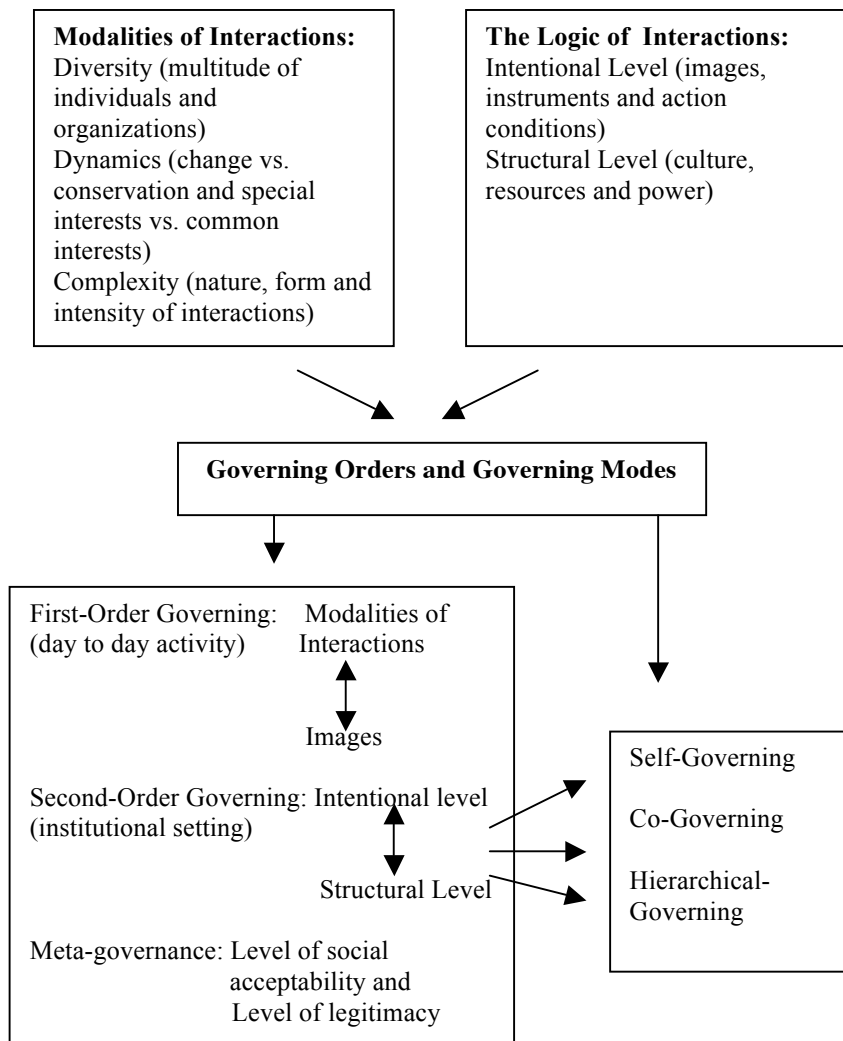
In fact self-governing, even though is not directly connected to the market institution, recalls an horizontal and self-regulating coordination among actors and each player is free to pursue its own goals. In this institutional setting interactions take place without any constraint and naturally, contributing substantially to the functioning of modern societies.

Co-governing: differently from the previous case actors are not free to pursue their own goals but they are negotiated among them. However, even in this case coordination is horizontal, there is not a central and dominating governing actor, and

is carried out through mutual adjustments. Networks are an example of this mode of governing that often are based on existing established relationships present in the society.

Hierarchical governing: this is the typical way of governing based on policies and legal and administrative rules. In this case coordination is not horizontal but hierarchical and formal, goals are imposed from above and interactions take place in an environment characterized by hierarchical institutions.

Table 1. From interactions to governance



Whereas first-order governing concerns day-to-day activities and problem solving and opportunity creation, second-order governing the institutional setting in which

first-order governing takes place, the meta-governance regards the framework of managerial and political standards in which the other two orders evolve. Managerial standards refer to the social acceptability of governance conditions, for example a certain level of taxation, and political standards refer to level of legitimacy through which issues are handled. To say different, what and who rules governors and their governing. Then it is not enough to analyse how a system works; what is crucial is to see at what social costs and at what degree of representation. Otherwise there is the risk of implementing problem solving and opportunity creation in an inefficient, ineffective and probably also illegitimate and unjust way (see Table 1).

4 E-government in Italy

4.1 The First Phase

The first cases of e-government in Italy date back to the middle of the '90s. As opposed to the Anglo-Saxon world - and particularly the U.S. and Canada where community or civic networks emerged spontaneously from the society for sharing information and debating several aspects of the social life of a specific neighbourhood (Beamish, 1995) - in Italy the role of local governments has been crucial from the beginning. Of course, even in Italy's case the so called free nets typical of the U.S. appeared and were managed directly by groups of citizens, but soon their importance vanished in favour of networks supported by local governments.

What were, at that early stage of development, the contents of e-government? As it has been already mentioned, this period was characterized by civic networks and new forms of political organization. Unlike the past, without the mediation of political parties or other representative organizations, citizens can now be an active part of the political process and community management. So network technologies can be seen as instruments that support both a socializing effect, promoting new ways of reciprocal exchange, and a transformative effect leading to alternative modalities through which it is possible to intervene in the political arena (Ciborra, 1993). Probably, using a term in fashion in these days, it is e-democracy that best represents the nature of e-government in its first phase.

4.2 The Second Phase

The scene changes profoundly in the second half of the '90s. The establishment of the internet protocol and of the world wide web standard have provoked an explosion of governmental web sites. Probably what best represents the last few years of the 20th century was the information effect. For sure e-democracy instruments have been refined and improved but they did not significantly spread to local authorities. On the other hand the majority of municipalities have built web sites that simply provide information. Normally it is possible to get information concerning the administrative and political structure, who covers specific roles, official documents, plans and proposals etc.

These are the characteristics of the second phase of e-government. Now pressure from civil society is not as important as in the first phase. What has emerged is what new institutionalism calls mimetic isomorphism (Powell, DiMaggio, 1983). That is, organizations start up imitative processes when they face difficulties coming from their environment, emulating solutions or interventions commonly applied in their own sectors. This caused a dramatic increase in the number of local authorities building their on web sites.

4.3 The Third Phase

Recently things have started changing again and we can see the beginning of a new phase. What is the reason for these changes? The purpose of these changes is to modify the level of interactions between citizens and the public administration through information technology. Lately web sites, for example, do not only permit access to information but also interaction with that information. For example, it is possible to download forms for executing administrative dossiers (one-way interaction), to complete directly a dossier as in the case of tax calculation (two-way interaction) and to effect money transfer (transaction) (RUR, 2002). However, data related to these more advanced ways of interacting show that the majority of local authorities are still stuck at the information level or the one-way interaction level. Nevertheless, this trend suggests that we are moving from the information effect to the service effect. That is, information technology does not only support the information background necessary to obtain a service but it also permits the complete execution of a service.

The '90s and the beginning of the new century represented a period of administrative reforms that deeply affected public administration functioning. Specifically, relationships between central government and local government were remodelled, shifting power from the central state to the regions and other local authorities. The inversion of competences (local authorities execute all administrative functions except ones explicitly given to the central state whereas before it was the contrary) and the establishment of the subsidiarty principle (administrative functions have to be assigned to the authority level closest to citizens as long as this is possible and effective) were among the most important reforms and have an important effect on cooperation between the central state, the regions and other local authorities. These reforms do not directly concern e-government but it is clear how they have facilitated its development.

4.4 E-government Policies

It was the 1st e-Government notice of the year 2002 that has given an important impulse to e-government projects at the national level because of its 120 million euros available as co-funding. These funds were awarded to support 98 projects for services to citizens and companies, and 40 projects for realizing regional and territorial infrastructures.

In order to confront this scenario the Ministry for Innovation and Technology (MIT) actively participates in the regional programming stage and has established new agencies.

The Regional Competence Centres for eGovernment (RCCs) are probably among the most important ones. In fact, each region has its own centre, supported both by the MIT and the regional level, in order to increase cooperation among regional and local authorities, among regions, and between the central government and the regions.

Among the principles underlined by the 1st e-Government notice there is the “Aggregation of the proposing agencies, to maximize the number of administrations involved in funding”. This principle is important because it has given the chance for institutionalised spontaneous forms of programming among local authorities independent of their level, size and location.

The PEOPLE project and the POLIS–ComuneAmico.net project are just two examples. PEOPLE brings together, until now, 56 municipalities and 1 province representing a total of about 7.5 millions inhabitants spread in 13 regions whereas POLIS–ComuneAmico.net reunifies, until now, more than 200 municipalities and 5 provinces spread in 14 regions representing about 4 million people. These projects are similar, both awarded by the 1st e-Government notice funds, even though POLIS–ComuneAmico.net has been designed for supporting small and medium size organizations. Each of them has a leader that coordinates the different local authorities in charge of the developing a specific service that will permit the creation of a federation that can offer to citizens and companies more than 100 services online, at least in the PEOPLE case.

Therefore e-government policies tend, on one hand, to centralize or, better, to coordinate and bring order to the spontaneous surfacing of e-government applications typical both of the so-called first phase and second phase, pushing regions to introduce specific plans based on EU suggestions and establishing new control organisms and, on the other hand, continue to support what is emerging naturally from the territory as shown by the PEOPLE project and POLIS–ComuneAmico.net project.

5 Governance and the Italian E-Government

Free nets or community networks can be seen as side-effects provoked by an innovative technology and its amateurs. They constituted a small system but, because of *diversity*, *dynamics* and *complexity*, using the terminology introduced before, things changed substantially and now we can talk about e-government. Why? Simply because of the problem solving question and the opportunity question that are the main points of the first-order governing. In other words, socio-political systems on one side have seen the opportunity to use information technology in order to offer new services and new modalities in order to intervene in the political arena, while on the other side, this technology has become an effective problem-solving instrument.

Passing to the second-order governing, we ask what was the institutional setting that characterized this first phase of e-government? Namely, how problem solving

and opportunity creation have been controlled and enabled. A cooperation between institutional actors (local authorities, EU, universities etc.) and social actors (civic networks) constituted this institutional setting. And were its governing *modes*? For sure we are not in a situation of hierarchical governing. At this stage any actor imposes goals, or whatever. Whereas what probably better represents this situation is the so-called mixed-mode between self-governing and co-governing. Self-governing because the institutional context that had characterized the first phase is based on actors' free choice to be involved. On the other hand we cannot exclude that, somehow, goals had been negotiated and that this is a typical co-governing mode.

Concerning the meta-governance or third-order governing we should inquire about the social acceptability of the governance condition and its level of legitimacy. The first phase of e-government was not problematic on these issues. It was mainly a spontaneous phenomenon that came from society and we have no data regarding particular lobbying activities by free nets that force us to think about a legitimacy issue (see table 2).

The second phase of e-government was characterized by the diffusion of the internet protocol and the world wide web standard that provoked the so-called information effect. This effect responds to the problem of ameliorating relationships between citizens and public administration and it concerns the first-order governing of this phase. Even in this case public administrations take advantage of information technology in order to face a sensitive issue like that which regards citizens' information.

In this phase the institutional setting varies in comparison to the first phase. The reduced involvement of civil society and the leading role played by local authorities delineate a significantly different second-order governance and, if we consider governing *modes*, the mixed-mode between self-governing and co-governing changes toward systems that are more self-governed because negotiations among actors had left space to local authorities' autonomous decision processes of.

Issues presented by meta-governance are more important at this level. First of all the so-called digital divide concerns the social acceptability of e-government since the entire population still doesn't have access to e-government. Of course, during the first phase, only a very small slice of the population could take advantage of the services offered by new technologies. This doesn't mean, however, that the issue was not relevant (see Table 2).

The analysis of the third phase is quite a bit more complicated compared to the previous ones. To pass from the information effect to the service effect means taking into consideration the so-called back office and the entire public administration structure. It is a completely different matter then considering only the front office.

Technological innovations, administrative reforms and pressures from civil society caused a stir of *diversity*, *dynamics* and *complexity* that resulted in on-line services as the public administration's new frontier. This is what has emerged, in few words, from the first-order governance of the third phase. That is, a scenario that places traditional modalities side by side with new ones supported by information technology in order to execute day to day activities.

Of course this has had tremendous effects on the institutional setting. At this point local authorities and, particularly municipalities, are no longer the protagonists of e-government development. A shift toward the central level and, mainly, the regional

level is taking place. On the other side, the spontaneous aggregations of local authorities are emerging that recall the dynamics that characterized the first steps of e-government development.

Table 2. Governing orders and Governing modes of the three phases of Italian E-government

	First-Order Governing	Second-Order Governing	Meta-Governance
First Phase	Information Technology offers new modalities of interactions	Institutional actors and civic networks cooperation (mixed mode between self-governing and co-governing)	Spontaneous and limited phenomenon
Second Phase	Internet protocol and www standard diffusion ameliorate citizens-public administration	Leading role played by local governments (Self-governing mode)	Digital divide: only a small part of the population uses e-gov. services
Third Phase	e-gov .policies introduction and entire public administration back office involvement	Regional plans and central gov. agencies integrate municipalities action (mixed mode of hierarchical governing, co-governing and self-governing)	Digital divide: only a small part of the population uses e-gov. services

More in detail, through the analysis of governing *modes*, one realizes that for the first time hierarchical governing plays an important role. Regional plans, the constitution of Regional Competence Centres for e-Government and the Ministry of

Innovation and Technology harmonization activity are all signals of hierarchical coordination. On the other hand, as shown by the PEOPLE project and by the POLIS-ComuneAmico.net project, co-governing is again becoming a relevant modality for the implementation of e-government and administrative reforms that tend toward greater autonomy for local authorities. This suggests that self-governing is still an option to pursue. This is a typical mixed-mode in which all the three governing modes live together.

Concerning meta-governance, even in this phase, the digital divide seems the main issue (see Table 2). From the technological point of view, and probably even from an administrative point of view, it seems that e-government can be effective in a reasonably short time. But what about the percentage of citizens and companies that take advantage of it?

6 Conclusions

This paper has tried to delineate the development of e-government in Italy from its first steps in the middle of '90s to the present, from a period in which only a few thousand people and very few municipalities were involved to a project of public administration renewal that regards millions of people, all administrative levels, public investments, companies, the European Union etc.

For sure it is too early to evaluate this process. Moreover, until a few years ago, it was substantially a spontaneous phenomenon and, only in the recent years, has it become the object of policies first at the regional level and then at the national level.

These policies, in part, try to regulate this spontaneity in order to avoid spoiling public resources in technological duplications and programming overlapping, and in part focus on an equilibrated diffusion of on-line services all over the country both through legislative instruments and coordination agencies.

Moreover these policies have been introduced contemporarily to important administrative reforms that have shifted power from the central government to local governments, allowing the latter greater autonomy. This autonomy, on the one hand, has permitted the streamlining of bureaucratic procedures and regulations, while on the other hand has become an obstacle to the whole public administration coordination.

Therefore it is difficult to say if the harmonization objective will be reached. It certainly will not be achieved in the short run, both because of the nature of e-government implementation, the characteristics of administrative levels and the diversity of socio-economic conditions of the country. On the other hand, a loose coordination could reveal itself not an insuperable barrier given past e-government development.

The range of policy instruments in recent years shows the nature of the issues at stake while trying to control, on the one hand, the excessive deregulation and, on the other hand, trying not to hamper the spontaneous growth of this form of government.

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