Citizen Web Empowerment in a network of European Municipalities: "value for citizens" in web 2.0 projects

Prof. Luca Buccoliero PhD, CSS-LAB Bocconi University Milan luca.buccoliero@unibocconi.it

Dr. Elena Bellio, CSS-LAB Bocconi University Milan elena.bellio@unibocconi.it

Abstract: Internet contributes to the growth of new demand for citizen empowerment. These areas may be summarised as follows: (a) the request of access to authoritative, customized and immediately usable information; (b) the hope that a direct and informal relationship may be established with politicians and civil servants; (c) the desire of the citizens to be "active players" within the network. In the presence of a challenge such as this, we nevertheless note that the adequacy and characteristics of the web strategies of public administrations have, up to the present, not been subjected to thoroughgoing critical analysis. The aim of this article is three fold: (a) to provide some key-elements in order to define the content of an efficient web strategy, with regard to the issue of citizens empowerment, (b) to benchmark the degree of citizen empowerment of public administrations' websites across a network of European Municipalities, (c) to highlight the value elements of web 2.0 projects in European Local Governments, through an in-depth analysis of Venice case study.

I INTRODUCTION

To what extent do the innovative strategies of European Local Governments explicitly include a web strategy aiming at increasing citizens' empowerment also through innovations related with "web 2.0" solutions?" Can Web 2.0 boost citizen confidence in local governments? Does satisfaction with public services and administrative performance lead to greater trust in political performance?

ICT and the Internet have transformed every institution, including public administration bodies. These institutional changes have grown from a technology-centric vision to a content-centric one and, more recently, to a citizen-centric approach (King and Cotterill 2007). We must remember that the public sector, not being subject to competitive pressure, has been slower than the private sector in this process. However, many public administration bodies are at present ready to enter the phase of digital economy, offering the possibility to interact and exchange information through the net. In fact, there is a general recognition that citizens should no longer be perceived as mere recipients of services, but as active players in the whole process. The goal is to create a flexible administration responsive to the needs expressed by the territory and able to connect with citizens and interact with them as much as possible.

It has been a long time since public administration bodies began to investigate the potential of Web 2.0 to improve service delivery, democratic responsiveness and citizen participation (Fountain 2001). So far, many administrations have passed the exploratory stage of analysis and have engaged in concrete, operational initiatives (European Commission 2008). However, assessing their achievements is not an easy task. It means, in fact, studying the whole network of relationships –politicians *vis-à-vis* bureaucrats, politicians *vis-à-vis* citizens and bureaucrats *vis-*

 \dot{a} -vis citizens – to determine if one actor's attitudes towards another have changed. Recent studies have investigated the issue, but they have been sparse and inconclusive about whether egovernment may significantly improve citizen satisfaction and trust for civil servants and political leaders. An ordinary least squares regression analysis of 2001 Hart/Teeter data (a U.S. national public opinion survey by the Council for Excellence in Government) concluded that e-government users were no more likely than non-users to trust or be confident in government or to believe the government is effective in solving problems (West 2004). Drawing on the same data, Cohen (Cohen 2006) found that the Internet as a way of connecting citizens and government may have little impact on satisfaction levels for contacts that require a government official's response. Farrelly (Farrelly 2009) points out that some aspects of Area Forums may even present barriers to effective participation. These findings imply that e-government as a mere technological solution is not the answer to citizen dissatisfaction in their contacts with public administration bodies. Arguing in a similar vein, Parent, Vandebeek and Gemino (Parent, Vandebeek et al. 2005) suggested that e-government itself is not sufficient to induce trust: based on an Internet survey of 182 Canadian voters, they found that use of Internet to transact with the government had a positive impact only on citizens with high pre-existing levels of trust, with no positive impact on those whose trust level was either neutral or negative. Andrews et al. (Andrew, Cowell et al. 2008) state that there remains considerable scope for improving activities that address the learning implications of effective citizenship.

More optimistic results emerged from Tolbert and Mossberger (Tolbert and Mossberger 2006), who used a two-stage multivariate analysis of the 2001 Hart-Teeter data to study the relationship between e-government use, attitudes towards government processes and trust in government. They analyzed variations among local, state and federal e-government users, finding a positive relationship between trust and use of a local government website (although this relationship was not statistically significant at the federal and state levels). Welch, Hinnant and Moon (Welch, Hinnant et al. 2005) related general satisfaction with e-government – intended as a function of transaction, transparency and interactivity satisfaction – to citizens' trust in government. They showed that e-government users are in fact more likely to trust government as a result of their experiences online. However, they also found that citizens often recognize when there is a lack of interactivity in e-government services and that such perceptions correlate negatively with satisfaction. They concluded that the negative relation to interactivity might be a sign of the predominance of one-way e-government. Joining with these critical voices, an analysis of 35 large European cities' websites by Torres, Pina and Acerete (L.Torres, Pina et al. 2006) showed that most services offered online are not actually interactive e-services, nor are they participatory (i.e., e-democracy services). A possible explanation may be offered by Brown (2005), who recently emphasized that two-way e-government initiatives are sometimes hindered by political leaders who fear a decline in their position as mediators between citizens and administrations.

Hence, despite the general recognition of Internet as a means for improving organizations' transparency, efficiency and customer orientation (Wong and Welch 2004), there is still a long way to go before public administration bodies will be able to exploit its potential to the fullest.

II "WEB 2.0" FOR THE PUBLIC SECTOR

Defining 'Web 2.0' concisely is very difficult, because it is a young expression with blurred contours and there is still disagreement over whether to consider it an innovation or not, with some people claiming that it simply refers to normal developments in the Web.

Tim O'Reilly has attempted to provide a clear definition: "Web 2.0 is the business revolution in the computer industry caused by the move to the Internet as a platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network affects to get better the more people use them" (O'Reilly 2007). The keywords are: a) web as a platform; b) data controlled by users; c) participatory architecture.

It seems obvious that Web 2.0 is not a new version of the Web. It is therefore incorrect to see this change only from a technical point of view. Angermeier (Angermerier 2005) made a mental map - a form of graphic representation – to define the concept of Web 2.0. This representation shows that many terms are interconnected, which demonstrates how difficult it is to formulate a clear definition of Web 2.0.

The key points identified are:

1. User participation

The web should be the medium that enables its users to participate and share information. The services offered are developed under the open-source paradigm, where users' interaction is a source of development and growth for the site.

2. Transformation of data ('remixability')

'Remixability' stems from the desire of users and developers to be able to use and share information and then process them and change them by developing new concepts and ideas.

3. Design centered on the user's needs

Changes in web design ought to be centered around the needs of the user, through the use of technology that can increase user-friendliness.

Areas where Web 2.0 technology might be exploited within public organizations include:

- areas where the organization aims to promote innovation, as Web 2.0 is based on maximizing the diversity of input into the creative process;
- 2. areas where geographical barriers prevent people from working together;
- 3. areas in which the links of an organization with its stakeholders are weak;

4. areas where there are significant skills or knowledge outside the organization.

Thus, a unique opportunity appears for government entities – the opportunity to exploit the collective intelligence present on the net in order to become more reliable and efficient.

III BENCHMARKING OF "CITIZEN WEB EMPOWERMENT" IN EUROPEAN LOCAL GOVERNMENTS

This section of our study attempts to extend previous empirical research to understand and to measure the degree of citizen web empowerment in European Local Governments' Portals by developing and index for benchmarking citizens' empowerment through web portals (*Citizen Web Empowerment index*).

The Sample: a network of European Local Governments

The Major Cities of Europe IT User's Group¹ (MCE) is an independent group of representatives from cities all over Europe.

The objectives of this network are:

- to effect a voluntary exchange of ideas, visions and experience between members of the Group for the purpose of improving the performance of local government by using information technology;
- to represent the collective interests of members of the Group in discussions with public authorities, suppliers of information technology and other relevant organizations at an European level.

The Group was founded in 1982 as a result of an initiative by the Greater London Council. The membership covers almost every country in Scandinavia and the Western and Southern parts of Europe. Since the end of the Cold War cities from the eastern part of Europe have also joined the Group, together with some non-European cities, such as Tel Aviv, Boston and Tiblisi. Although the exact position and tasks of local authorities in the different countries may vary, the

main objectives will be the same. The value of the Group lies in the benefit of its members sharing and exchanging information, so that common problems and solutions can be discussed. Membership of the Mayor Cities of Europe is open to every European city that values innovation and wishes to share its experience with colleagues from other countries.

For the research the cities which are members of the MCE group were considered, this means that the websites of 42 Local Government spread in 20 different Countries have been analyzed (see table 1).

Table 1: Sample

Switzerland	Norway	Bulgaria
Genève, Zürich	Oslo, Sarpsborg	Burgas
Italy	Great Britain	Spain
<u>Modena, Roma, Siena,</u> <u>Trieste, Venezia, Prato,</u> <u>Parma, Livorno</u>	Birmingham, Belfast	Barcelona
Bosnia and	Slovenia	Austria
Herzegovina	Koper Liubliana	Wien
<u>Banjaluka</u>	<u>reper</u> , <u>Ljubijulu</u>	
		9
Croatia	France	Greece
Zagreb, <u>Rijeka</u>	Paris, Greater Lyon	<u>Trikala</u>
Denmark	Sweden	ISRAEL
Aarhus, Copenhagen	Stockholm, Göteborg, Uppsala	<u>Tel Aviv</u>
Netherlands	Ireland	Germany
Den Haag, Zoetermeer	<u>Cork</u> , <u>Dublin</u>	<u>Saarbrücken, Leipzig,</u> <u>Dortmund, Bremerhaven,</u> <u>Bremen, Hamburg, Berlin</u>

The research model

The research project described here aims to engage in a more in-depth study the issue of citizens' empowerment within the context of the introduction of information and communication technologies (ICT). The study has been conducted on the MCE Local Governments' Portals. The baseline research hypothesis is that the information and services provided by Local governments via the web are capable of enhancing citizens' empowerment regarding two key dimensions: information held by citizens and control on the information with respect to his/her needs.

The various typologies of web information which allow to evaluating the level of e-participation were used to develop an indicator by means of which ratings could be given for the websites of all the cities considered. This indicator, termed Citizens Web Empowerment Index (CWEI), is given by the aggregation of 4 components, each of which is calculated on the basis of the presence of certain elements characterising the structure of the website considered². The maximum theoretical value is 100 while each sub indicator has a different theoretical value:

CWEI = e-information + web 2.0 tools + e-consultation + e-decision making process

During the period, March-May 2010, the indicator was used to assess the websites of the above mentioned members of MCE, the aim being to arrive at certain assessments of the current state of maturity of their web strategy in relation to potentials for an increase in citizens' e-participation. Analysis and rating of sites was based on two fundamental criteria:

 the immediacy with which information or services can be obtained while navigating the site, without impediments and time-consuming procedures coming into play when attempting to access information or services; systematic (as opposed to sporadic) presence of the information or services required from the site.

Construction of CWEI indicator

CWEI, as pointed out above, is a multidimensional indicator because it is composed of a series of sub-indicators the objective of which is the measurement of the various aspects of citizens' participation via the web.

Figure 1 illustrates the manner in which the *CWEI* sub-indicators are linked to the main ambits of application of ICT on the websites of Local Governments.





The first element making up the overall index of citizen empowerment has been termed *Einformation*. It relates to the presence on the website of some general information regarding the city and its policies.

Assessment was conducted on a number of these characteristics: the presence of the city politicians' list, considering if there is only peoples' name and surname or a wider range of details to be able to contact the municipality officials. Clear presentation of the City Government organisational structure was also assessed since it is considered as an important way of orientation among the total amount of services provided. The on-line availability of policies, procedures and of legislation also helps. The last element considered in this sub indicator is the on-line presence of the budget and the way it is addressed.

The second component of the indicator consists in *Web 2.0 Tools*. It refers to the existence of social networking applications made for a high level of citizens' participation – empowerment. But not only the presence of the main instruments was assessed (e.g. forums, blogs, newsletters, Facebook, Twitter, Flicker, Youtube), also specific services provided through mobile were included. Of course the presence of a "one-stop shop type portal" for citizens to interact with the municipality becomes an interesting element that makes the difference to citizens.

To construct sub-indicator *E-consultation*, various elements relative to the way of receiving information through the site were considered, as the existence of the mayor's (or elected official) personal website and its content (e.g. details to reach the person, feedback forms, reputation systems as online polls or e-surveys, internet petitions).

The fourth component of the indicator is termed E-*decision making process*. This sub-indicator assesses evidences that the municipality considers the opinion of citizens in decision making processes for example through e-voting systems and gives evidence on what decisions have been

taken starting from the consultation process (e.g. publication of on-line pools, e-surveys results and subsequent actions taken).

Results

From the analysis of the single *Citizen Web Empowerment Index* sub indicators we learn that, as yet, few Local Governments have developed web-based strategies oriented toward information and user participation. It was observed that none of the local websites surveyed had reached an overall CWEI rating approaching the maximum theoretical value of 100; in fact the average CWEI value is 37,8 over 100.

Considering the average CWEI values per sub-indicators (Table 2), it can be noticed that the higher level of empowerment contribution is given by the presence of *E-information*; this is not surprising since this is the only component of the index which stands in the middle between a traditional website structure and a participatory one. On the contrary, the lowest level is registered by *E-decision making process sub indicator*. This testifies that the awareness of Local Governments on the potentials of the web is only partial; in fact the instruments to make citizens participate in many cases exist (for example forms that allow to report problems very easily online, polls to evaluate certain initiatives), what is missing is something that makes citizens aware that they have been taken into account, something that gives evidence on how citizens' opinion was used in the decision making process, something that develops e-participation to empower citizens.

	average CWEI sub- indicators values
E-information	74/100
2.0 Tools	23,2/100
E-consultation	32,4/100

Table 2 – Average CWEI values by sub-indicators

E-decision making process 8,3/100

Table 3 shows the "top five" scores. Those cities are very different one among the other; they are geographically distant and have different political and socio economic situations but what brings them so close is the spirit which gives birth to their portals.

The first element that has been noticed is that the top results appear in contexts where, before the on-line offer of services was designed, infrastructures were built. Most of those cities have decided to offer optical fiber and wireless web infrastructure, which provide easy and cheap (or even free of charge) access to the web. The idea is to overcome the digital divide, by promoting the right to "digital citizenship". Setting the net is like creating long and safe binaries while providing tools for e-participation and citizens' empowerment is a way of putting wagons on it.

Table 3: Top 5 CWEI

		CWEI value
1 st	Trikala (GR)	87/100
2 nd	Hamburg (D)	83/100
3 rd	Wien (A)	79/100
4 th	Venice (I)	66/100
4 th	Tel Aviv (IL)	66/100

These 5 cities' web portals show the best "citizen empowerment" in the sample. A number of other interesting and significant best practices for each sub-indicator were collected in the analysis.

With regard to the *E-information* component, just in a few cases a list of politicians and of their personal information is offered. An interesting example is given by the city of Hamburg where, as shown figure 2, there is an innovative way to present the members of the Senate. Through an imagine gallery citizens can scroll all the pictures of senators and, by selecting one, access the personal cv.



Figure 2: Hamburg's web site

The research also revealed that very few Local Governments have introduced their budget online. Normally administrations don't refer at the financial situation or just present a few final data. Modena, a city situated in the North-east of Italy, as figure 3 shows, provides on line "program and budgeting" documents.



Figure 3: Modena's website

Analysis of *Web 2.0 Tools* reveals that there is an increase in the use of some social networks by local Governments. An example is provided by Uppsala, where the use of different social media is promoted.



Figure 4: Uppsala's website

Only a few local governments in the sample offer mobile services. A significant example is given by "barcelona.mobi", which is a full range of services offered by the city of Barcelona on cell phones. The website of the city allows entering very simply in the dedicated section where the needed information is provided. Anyone can learn how to access the service and once it is activated SMS, alerts and many applications can be used.





Turning to *E-consultation*, only a few portals register the presence of links to the Mayor's (or any other elected official) website. It is hard to find personal contact data or tools for a true interaction between citizens and politicians. A good example regarding this sub-indicator is given by Wien's website where there is a specific area (figure 6) that allows people to be in contact with the politician.

Kontaktformular	
Bitte beachten Sie * Feld muss ausgefüllt sein	
Ihr Anliegen	
Betreff Anliegen (maximal 4000 Zeichen)	
Persönliche Daten	
Anrede Name E-Mail	Frau 💌

Figure 6: Wien's website

A wider presence of internet petitions and reputation systems is registered, even if in many cases they are just forms to fill in and send online which means that they don't completely represent the participatory way of structuring a website.

A good example of citizens' empowerment is given by the city of Birmingham which offers in the homepage of its portal an area where anyone can report the needs of a specific area, such as maintenance, repairs and removal of litter in certain districts and in public parks. The user while reporting can also access to useful documents which could help him in finding solutions.



Figure 7: Birmingham's website

A very similar software was developed in Venice: it is called IRIS and is based on web 2.0 philosophy. This project will be explained in the next paragraph.

In terms of *e-decision making process* there is little evidence on how decisions are taken. Even if a presence of tools which allow a participatory atmosphere is revealed, rarely the results are shown. A simple but very efficient system has been revealed on Zagreb's website (figure 8). In the main page a question is addressed. Anyone can participate at the poll and also view the statistics about the answers. Figure 9 shows the effective participation model adopted by Trikala municipality.

e Modifica Visualizza Preferiti Strumenti ?				17		
) Indietro 🔹 📀 - 💌 😰 🐔 🔎 Cerca	• 🤸 Preferiti 🕢 🍰 - 🍃 🗷 - 🗔 🖓 🕯	1 🖸 😐 🚳				
irizzo () http://www.zagreb.hr/			💌 🛃 Vai 🛛 Links 🇯	ig -		
Nogle Koristite il elektronske razglednice?	🔹 🔧 Effettua la ricerca 🔹 🦛 🦛 🔹 🔯 Condividi 🍨 🧕	🔹 🤍 Sidewiki 🔹 🏠 Segnalbri •	🌮 Controlio • » 🔌 • 🕞 El	ntra •		
Zapošjavanje	Gradonačelnik Milan Bandić danas je u Remetama otvorio novolzgrađeni objekt Mjesne samouprave u kojem su	Šahovska simutanka Darivatelji krvi protiv prvaka Hrvatske u šahu	KOMUNALNI RAČUNI	-		
Vedunarodna suradnja Javna nabava 4. međun	smještene i Ambulanta i Pošta.	Streličarka Ivana Buden kod gradonačelnika	E-SKOLSTVO SLUŽBEN GLASNIK			
Galerge fotografija		139. niskopodni tramvaj	SJEDNICE ORADSKE SKUPŠTINE			
urističke informacije	Na 4. međunarodnom zagrebačkom salonu autokarikature 2010. kojeg je	Cest is d'Best od 3. do 6. lipnja	AKTI GRADONAČELNIKA			
ZAGrebus by Inejčec	otvorio gradonačelnik Milan Bandić, GRAND PRIX nagradu psvojio je	Zagreb pomaže Slavoniji	SJEDNICE GRADSKOG POGLAVARSTVA (Arbiva			
ZAGREB ZDRAVI GRAD	karikaturist Doru Avinte iz Rumunjske. Izložbu možete pogledati u predvorju	Kongres ISPA u Zagrebu ARHIVA VIJESTI	STANOVI, POSLOVNI PROSTOR I ZEMLJIŠTE			
Anketa ranog otkrivanja raka pluća i Poliziona pronha			IZBORI			
Istale ankste	Question		LINKOVI			and the
INKETA			Zagrebaćki holding		Amkata	Statistics
Koristite li elektronske	GALERIJA	VODIĆ ZA	Servisne informacije		Ariketa	
razglednice?	KULTURAN VOIC	ARA STARUJE GRADANE	HGK - Komora Zagreb		Koristite li elekty	azalednice?
2da -			Polojska uprava zagrebečka		L	
ne znam što je to	* Shin nana		zrak, pelud, biometeorologika prognoza		• da - 31,27%	
Glasaj Rezultati			DUMOVEC_skionište za životinje		no 42.00%	
			Ostalo		• 116 - 43,55%	
					 ne znam što je 	to - 24,73%
	Naslovna Mapa weba Impressum Uvieti korištenia Pi	sma urednici webmail				
	Copyright (C) 2010 Grad Zagreb, sva prava pric	ržana,			Prethodne	ankete:
				-	rictioune	annow.
	e but		This area	2	 Svida li vam se 	e redizainirana stranica?

Figure 8: Zagreb's website



Figure 9: Trikala's website

IV VALUE FOR CITIZENS IN WEB 2.0 SERVICES: VENICE CASE STUDY

This paragraph describes a possible evaluation model of the impacts of a participatory technology (web 2.0) in the relationship between citizens and Local Governments, through the improvement of citizen empowerment.

The research question develops on three levels; the objective is to find which are the main impacts of web 2.0 services on:

- citizens' trust;
- the municipality's back office organisation;
- the role of politicians.

The case study adopted for this analysis was developed in Venice, where in 2008 the Municipal Administration decided to develop its own optical fibres and wireless web infrastructure, which provides free access to residents and low-cost wi-fi connection for registered visitors.

Starting from this commitment, the "Amministrare 2.0" project has been developed, taking inspiration from the Web 2.0 philosophy.

Our study is focused on the IRIS software, to understand the logic behind its development, introduction and methods of use.

IRIS (Internet Reporting Information System) is a software designed to allow citizens to report needs in a given area. Through web access to a dedicated section in IRIS, the user can "tag" the reported problem on a map of the city and attach a photograph with the report.

To do this, the users provide detailed information on the type of problem reported as well as personal information, deciding whether or not to allow their own name and surname to be shown on the web (as shown in figure 10).



Figure 10 IRIS web service in Venice

The user can choose between sixteen alternative issues, each of which is sent to specific recipients according to their relative competencies.

The Municipality and/or the appointed maintenance department are obliged to respond to the citizen and indicate the feasibility and estimated time for the resolution of the problem and the change of status of the report is visible on the web.

The main value of IRIS lies in the back office operating mechanism. Through its introduction, as the Vice Mayor comments, the Administration, "overcomes the buck-passing which so often affects the public sector in Italy, leading to dissatisfaction by citizens and their strong detachment from politics."

Research model

The impact of IRIS on citizens and their relationship with the Public Administration

To carry out this kind of analysis, the citizens were divided into two groups: those using the IRIS software at least once and those who report incidents using traditional off-line systems, going personally to the Public Relations Office $(PRO)^1$.

A questionnaire was drawn up for each category.

By analysing the data gathered it was possible to find the main differences between the two groups. What surprised is that although the difference is small, the percentage of those who do not have their own connection is higher in the case of on-line users than off-line users.

Results highlight among IRIS users: a generally higher level of satisfaction, a better relationship with the Administration which is seen to be facilitated by the electronic procedure, an increase in the confidence that the reported problem could be quickly solved, a high interest in the problems reported by others.

To extract useful information the association technique was also used.

It was found that for those who report problems using the software there is a relationship between:

- the participation of the citizen in the improvement of the area he lives in and the possibility to see the problems reported by others.
- the level of effectiveness attributed to the use of the IRIS software for being in contact with the Administration and the usefulness attributed to the possibility of seeing the problems reported by others.

Instead, in the case of users who reported problems at the PRO a relationship exists between:

• the importance given to the participation of the citizen in the improvement of the area he lives in and the use attributed to the possibility of seeing the problems reported by others.

¹ Public Relations Offices (in Italian: *URP Uffici Relazioni con il Pubblico*) were established under Italian Legislative Decree 29/93 and made obligatory under Italian law 150/2000.

• the poor satisfaction in the off-line procedure and the lack of knowledge of the IRIS software. Some motivations which push users to use respectively IRIS or the off-line procedure were also considered. The data gathered from IRIS users shows how 40% of those responding think that the system helps to save time. A much lower percentage felt that it also assures: a trace of one's own contribution, a guarantee of being taken into consideration in a timely manner, the receipt of a reply from the Administration.

26% of those answering instead considered the off-line system as a way of assuring direct contact with the staff of the Administration. Those visiting the PRO directly considered also time savings and cost savings to be particularly important. Other factors are: being able to leave a trace of one's own contribution and the guarantee of being taken into consideration in a timely manner.

A. The impact of IRIS on the Public Administration

To carry out this kind of analysis, it was chosen to deliver semi-structured interviews to a group of ten civil servants, who have seen changes to their own jobs as a result of the introduction of the IRIS software.

The surprising fact is how all the interviewees except one do not consider IRIS to be a system which can have an impact on the improvement of relations between the Public Administration and the citizens. It is also shown how the interaction between the Municipality and its subsidiary companies has not improved since the introduction of IRIS, or at least has improved only marginally. Despite this, the efforts to increase the service continue and the work is facilitated by the possibility of receiving photos with the reports, and to be able to directly contact the system users. The staff reported an averagely low satisfaction in the new working method. This is in line with the above description, as IRIS was created to meet the needs of the citizens, and to satisfy their rights and needs, in fact, the system tends to make the public officials' jobs harder, forcing

them to respond in a timely manner to any kind of request and forcing them to be more committed, as IRIS offers an on-line service beyond normal office hours.

A final consideration: within the Municipality, following the introduction of IRIS, the decline in the role of the politician is not felt, while, it is perceived among the PRO staff.

B. The impact of IRIS on the function of politicians and their interaction with the Public Administration

To better understand what drove the Municipal Administration of Venice to design and implement a project such as Amministrare 2.0 and above all to develop an open source software such as IRIS, a focus group was organised, involving the politicians who promoted this initiative: the Vice Mayor and some of his close collaborators.

The true innovation of the Public Administration is the full implementation of the separation of public administrators from Public Administration employees, in which the public administrator is a planner who indicates the policies to be followed, while the Public Administration employee is a manager of those policies.

The application of a choice of separation implies a totally innovative cultural attitude which falls within the spirit of IRIS. IRIS in fact disintermediates the need, transforming citizens' needs from favours into rights.

The politician does not seek consent through specific favours, but rather through strategies, largescale plans, in the ability to "charm" people, offering long-term horizons.

According to this logic, whatever a citizen asks for, the Administration is bound to provide it. In the past, the citizen used the web simply to report a claim or download a form, today by introducing the logics of Web 2.0 he uses the Internet to create the contents of the web.

More than an organisational change, IRIS represents a cultural change within the Administration, it was created for the citizens and therefore the back-office had to adapt to IRIS rather than IRIS to the back-office.

V CONCLUSIONS

A number of preliminary conclusions may be reached on the basis of the analysis of the CWEI presented in paragraph IV:

- there is still a substantial immaturity of web strategies, still modulated on structures and organizational responsibilities instead of on the needs and on the demand of citizens' empowerment;
- 2. there is a lack of awareness of the need to assume a role of active partner for citizens' through the web portals by strengthening their level of empowerment and participation;
- there is a low penetration of web 2.0 tools and strategies and the diffusion of mobile applications is still weak.

Overcoming these three highly significant limits may turn out to be a prerequisite for concrete development of the provision of services for empowered citizens – a concept for innovation which Administrative systems are beginning to discuss.

Other relevant conclusions may be reached on the basis of the in depth service analysis presented in paragraph V (IRIS project in Venice):

 the point of strength of the Municipality of Venice is the creation of cheap, rapid access to the Internet, combined with an investment in human resources training;

- 2. IRIS is a totally new system which has demonstrated enormous potential through a great influence on three dimensions: the citizens, the Public Administration, the political system.
- 3. The Administration must continue to make great efforts to:
 - increase trust, respect and awareness of the institutions among the citizens;
 - promote among citizens interactivity skills, dissemination of detailed information on the activities which use ICT in order to create interest in them and assure that their advantages are immediately recognised.

VI BIBLIOGRAPHY

- Andrew, R., R. Cowell, et al. (2008). "Supporting Effective Citizenship in Local Government: Engaging, Educating and Empowering Local Citizens." <u>Local Government Studies</u> 34(4): 18.
- Angermerier, M. (2005). "The huge cloud lens bubble map web 2.0." Retrieved 10/05, 2010, from <u>http://kosmar.de/archives/2005/11/11/the-huge-cloud-lens-bubble-map-web2.0</u>.
- Cohen, J. E. (2006). "Citizen satisfaction with contacting government on the internet." <u>Information Polity: The International Journal of Government & Democracy in the</u> <u>Information Age</u> 11(1): 15.
- European Commission (2008). ICT for Government and Public Services.
- Farrelly, M. (2009). "Citizen Participation and Neighbourhood Governance: Analysing Democratic Practice "Local Government Studies **35**(4): 13.
- Fountain, J. E., Ed. (2001). <u>Building the Virtual State: Information Technology and Institutional</u> <u>Change</u>. Washington, DC, Brookings Institution Press.
- King, S. and S. Cotterill (2007). "Transformational Government? The role of information technology in delivering citizen-centric local public services "<u>Local Government Studies</u> 33(3): 21.
- L.Torres, V. Pina, et al. (2006). "E-Government Developments in European union Cities: Reshaping Government's Relationship with Citizens, Governance." <u>An International</u> <u>Journal of Policy, Administration and Institutions</u> **19**(277-302).
- O'Reilly, T. (2007). "What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software." International Journal of Digital Economics **65**(1): 20.
- Parent, M., C. A. Vandebeek, et al. (2005). "Building Citizen Trust through e-Government." <u>Government Information Quarterly</u> 22: 17.
- Tolbert, C. J. and K. Mossberger (2006). "The effects of E-Government on Trust and Confidence in Government." <u>Public Administration Review(3)</u>: 16.
- Welch, E. W., C. C. Hinnant, et al. (2005). "Linking citizen satisfactio with e-government and trust in government." Journal of Public Administration Research & Theory 15(3).
- West, D. M. (2004). "E-Government and the Transformation od Service Delivery and Citizen Attitudes." <u>Public Administration Review</u> **64**(1): 13.
- Wong, W. and E. Welch (2004). "Does E-Government Promote Accountability? A Comparative Analysis of Website Openness and Government Accountability "<u>Governance: An</u> <u>International Journal of policy</u>, <u>Administration and Institutions</u> 17(2): 275-297.

¹ http://www.majorcities.org/

 $^{^{2}}$ During the stage of quantitative determination, the value 1 was ascribed to the presence of the service or of the information considered, value 0 to absence.