ECONOMICS & Sociology

Pollifroni, M. (2014), Multidimensional Analysis Applied to the Quality of the Websites: Some Empirical Evidences from the Italian Public Sector, *Economics and Sociology*, Vol. 7, No 4, pp. 128-138. **DOI: 10.14254/2071-789X.2014/7-4/9**

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MULTIDIMENSIONAL ANALYSIS APPLIED TO THE QUALITY OF THE WEBSITES: SOME EMPIRICAL EVIDENCES FROM THE ITALIAN PUBLIC SECTOR

Received: June, 2014
1st Revision: September, 2014
Accepted: November, 2014

DOI: 10.14254/2071-789X.2014/7-4/9

ABSTRACT. The new frontiers of New Public Management (NPM) identified in the processes of e-government the new tools to provide efficiency, effectiveness and economy to the Public Sector.
In this scenario Public Institutions have shown a continuing and growing need to develop systems of multidimensional measurement of their performances.
The research – with reference the Italian context – lies in the complex area of the performance measurement applied to the Public Institutions and aim and scope of the paper is to demonstrate how the quality of websites (analysed under the aspects concerning the technological level and the administrative transparency) can also be considered a valid support to improve the quality of service provided online by the Public Sector.

JEL Classification: H11, M15, M21

Keywords: structure, scope, and performance of government; IT management; business economics.

Introduction

The present research – exposed in the form of survey – has been stimulated by the growing awareness that the Public Administration's websites (subsequently abbreviated as PA's websites) are essential tools to help the needs of the communities made up of citizens, companies and Non Profit Organisations (NPO): these needs are even more apparent in a time of widespread European crisis like the current one (Diacon *et al.*, 2013; Martin *et al.*, 2010) with evident effects in the economic and social field (Tileaga, 2010).

Lately in the Public Sector there has been a growing and constant need to develop measurement systems of multidimensional performances in order to combine the economic-financial information with those related to other aspects of the administrative activity, defined by actions aimed to improve the better respond to the citizen's and employee's satisfaction (Błoński *et al.*, 2013; Roch, 2006; Van Ryzin, 2004).

This work covers the complex topic of the Public Sector performance measurement concerning the new applications on e-government (Stoica *et al.*, 2013; Torres *et al.*, 2005): particularly, the indication is referred to the websites quality as representative part of the ability to answer adequately to the needs of the community changed over time (Cornero, 2012).

The growing awareness that the Public Administrations websites are an essential way to handle the citizen/consumer needs – such as the assurance to get right information online, the ability to log on to the Public Administration services in a quick and easy way, having a clear and an open dialogue with the Public Administration (Dawes *et al.*, 2009) – has promoted and stimulated the progress of the following survey whose results, in our opinion, show a quite singular indication about the websites quality current situation, that lead us to some considerations, explained in the final part of the paper.

The questions underlying the research can be summarized as follows:

- Is it possible to identify a correlation between the assessment of the PA's websites quality (analysed under the aspects concerning the technological level and the administrative transparency) (Chiou *et al.*, 2010; Dragulanescu, 2002) and the evaluation of the online services provided by the Public Institutions (Brown *et al.*, 1983; Radulescu, 2013)?
- Alternatively, in other words, what impact has the PA's website management on the quality of the services provided online? Is there a correlation between the two variables?
- In any case (affirmative or negative), what are the determinants of the value of the correlation?

The research has been carried out on the municipalities, capital cities of the twenty Italian Regions: the selecting system to locate the statistical units submitted to the inquiry responds to the need to respect the principle of territoriality, through the observation of the phenomena at the national level.

The methodological approach and the results of the research are presented in the following paragraph, while the next part of the paper is devoted to the discussion and analysis of the results, which will be followed by the conclusions.

1. Methodological path and presentation of research results

The object of the present study is the analysis of the correlation between the evaluation of websites (in terms of technological level and administrative transparency) [variable (X)] and evaluation of the services provided on line [variable (Y)] by the twenty municipalities, capital cities of the Italian Regions: the research data collected refer to the date of November 30th, 2013.

The decision to give the character of variable (Y) to the evaluation of services provided online, depending on the evaluation of websites (profile declined as a variable (X), concerning the technological level and administrative transparency), stems from the fact that the levels of effectiveness and efficiency of the services provided online are strongly influenced by the management standards held by the website hosting the same services. The research was carried out throughout the entire universe of reference of the statistical population under study: the profile of the research, for this reason, did not require further elaborations concerning the statistical inference.

A) *The evaluation of websites (in terms of technological level and administrative transparency) [variable (X)]*.

The variable (X) can be represented by the following function $X = f(X_\alpha, X_\beta)$, where:

- X = is the composite evaluation of the websites;
- X_α = is the sub-evaluation concerning the technological level;
- X_β = is the sub-evaluation concerning the administrative transparency.

The methodological path followed in the survey is explained in the following points.

The sub-evaluation concerning the technological level (X_α).

The sub-evaluation concerning the technological level (X_α) was performed through the use of the instrument called "*W3C Markup Validation Service*" (or W3C-MVS, or Markup Validator), developed by the World Wide Web Consortium (W3C)[1]. The tool provides a qualitative website assessment expressed on the following four levels: 1) AAA, maximum level; 2) AA, medium level; 3) A, minimum level; and 4) NE, not evaluable level. The qualitative assessment has been subsequently converted into a quantitative score expressed in 10/10.

The sub-evaluation concerning the administrative transparency (X_β).

The sub-evaluation concerning the administrative transparency (X_β) was achieved through the instrument of the Compass of Transparency (or CoT), a tool developed by the Italian Ministry for Public Administration and Simplification[2].

The tool provides a quantitative assessment expressed in 65/65, based on the detection of 65 indicators: in the final part of the study the scores were converted to 10/10.

The overall assessment of the variable (X).

The overall assessment of the variable (X) – concerning the composite evaluation of the websites (operated by X_α the sub-evaluation concerning the technological level and by X_β the sub-evaluation concerning the administrative transparency) – has been expressed as the simple arithmetic average of the two sub-variables previously measured in 10/10. The final score of the variable (X) concerning the single municipality (i) may be expressed in the following formula: $X_i = \mu_i = \sum(X_\alpha : X_\beta)_i / 2$.

The final results of the search are shown in *Table 1*.

[1] This Consortium (W3C) is an international community where Member organizations, a full-time staff, and the public work together to develop Web standards. Led by Web inventor Tim Berners-Lee and CEO Jeffrey Jaffe, W3C's mission is to lead the Web to its full potential (*Source*: http://www.w3.org/Consortium/). The Markup Validator "(…) *is a free service by W3C that helps check the validity of Web documents. Most Web documents are written using markup languages, such as HTML or XHTML* (…). *This validator can process documents written in most markup languages. Supported document types include the HTML (through HTML 4.01) and XHTML (1.0 and 1.1) family, MathML, SMIL and SVG (1.0 and 1.1, including the mobile profiles). The Markup Validator can also validate Web documents written with an SGML or XML DTD, provided they use a proper document type declaration. This validator is also "An HTML validating system conforming to International Standard ISO/IEC 15445 – HyperText Markup Language, and International Standard ISO 8879—Standard Generalized Markup Language (SGML)" – which basically means that in addition to W3C recommendations, it can validate according to these ISO standards* (…)" (*Source*: http://validator.w3.org/).

[2] The Compass of Transparency "(…) *is an automated online instrument that gives the citizens the possibility to monitor, in real time, the implementation of all the data and information requirements imposed by Italian law on the websites of Public Administrations. The aim is to support the government, through the direct involvement of citizens in the continuous improvement of the quality of online and digital services. It is a system of rules, processes and technologies that combines the three basic principles of Open Government: Transparency of Public Administrations, citizen participation and collaboration* (…). *The analysis is performed by comparing the found data and information with contents defined and standardized by the laws of transparency and guidelines on websites* (…). *The most important functionalities of the Compass, all of them being publicly accessible by anyone and multilingual, are the following: 1.Check the site, 2.Compare the site, 3.Ranking between P.A.s, 4.Give your opinion, 5.Graphic dashboard. One of the aims of the Compass is to extend the use of this tool to an international level. In this way, it would be possible to create an international federated system of "transparency compliance", that would eventually evolve into a more cohesive one, characterized by a multi-language ontology giving the possibility to perform real-time automatic benchmarks between countries* (…)" (*Source*: http://www.magellanopa.it/bussola/page/overview.html).

Table 1. The overall assessment of the variable (X) concerning the composite evaluation of the websites applied to the twenty municipalities, capital cities of the Italian Regions

Italian Regions	Capital cities of the Italian Regions	(x_α) Qualitative assessment made by W3C-MVS	(x_β) Quantitative assessment made by CoT	(x_α) Assessment made by W3C-MVS converted into a score expressed in 10/10	(x_β) Assessment made by CoT converted into a score expressed in 10/10	(x_i) Final score, where: $x_i = \mu_i = \sum(x_\alpha : x_\beta)_i / 2$
Marche	Ancona	AA	02/65	6,6667	0,3077	3,4872
Valle d'Aosta	Aosta	AA	0/65	6,6667	0,0000	3,3333
Puglia	Bari	AA	0/65	6,6667	0,0000	3,3333
Emilia R.	Bologna	AA	50/65	6,6667	7,6923	7,1795
Sardinia	Cagliari	AA	46/65	6,6667	7,0769	6,8718
Molise	Campobasso	AA	65/65	6,6667	10,0000	8,3333
Calabria	Catanzaro	AA	0/65	6,6667	0,0000	3,3333
Tuscany	Florence	AA	60/65	6,6667	9,2308	7,9487
Liguria	Genoa	AA	60/65	6,6667	9,2308	7,9487
Abruzzo	L'Aquila	AAA	65/65	10,0000	10,0000	10,0000
Lombardy	Milan	AA	65/65	6,6667	10,0000	8,3333
Campania	Naples	AA	65/65	6,6667	10,0000	8,3333
Sicily	Palermo	AA	65/65	6,6667	10,0000	8,3333
Umbria	Perugia	AA	60/65	6,6667	9,2308	7,9487
Basilicata	Potenza	AA	65/65	6,6667	10,0000	8,3333
Lazio	Rome	AAA	61/65	10,0000	9,3846	9,6923
Trentino A.A.	Trento	AA	30/65	6,6667	4,6154	5,6410
Friuli V.G.	Trieste	AA	0/65	6,6667	0,0000	3,3333
Piedmont	Turin	AAA	65/65	10,0000	10,0000	10,0000
Veneto	Venice	AA	64/65	6,6667	9,8462	8,2564
===	===	===	===	===	===	===
Average	===	===	===	7,1667	6,8308	6,9987
Median	===	===	===	6,6667	9,2308	7,9487
Modal	===	===	===	6,6667	10,0000	8,3333
Std. Deviation	===	===	===	1,2212	4,2184	2,7198
Minimun	===	===	===	6,6667	0,0000	3,3333
Maximun	===	===	===	10,0000	10,0000	10,0000

Source: Author's Data Processing.

B) *The evaluation of the services provided on line [variable (Y)]*.

The evaluation of the web services provided on line [variable (Y)] by the twenty municipalities, capital cities of the Italian Regions, used the tool called Radar Web PA [or PA (Public Administration) Web Radar][3].

Every single variable of the rating model is organized according to a value scale from 0 to 5. The total score of the 22 variables observed, compared to the maximum obtainable

[3] The tool is provided by Formez PA, the center services, assistance, studies and training for the modernization of the Italian PA (Public Administration) – that operates nationally and responds to the Department of Public Administration of the Presidency of the Council of Ministers. The Radar Web PA "(…) *is a measurement instrument offered by the Public Administrations in order to observe the website services with critical aspects on which it is appropriate to develop improving actions to keep growing the website quality level of the services provided. The measurement methodology Radar Web PA arises from the transposition into measurable variables of the information contained in a specific matrix regarding 22 variables* (…)" (*Source*: http://europa.formez.it/content/radar-web-rilevare-la-qualit%C3%A0-dei-siti-web-della-pa).

value equal to 110 (maximum score of each variables equal to 5 product for number 22 variables considered). The next step of the methodological path regards the normalization of the obtained results in the same scale of values used for the W3C Markup Validator and the Compass of Transparency, in order to proceed to the stated data analysis with the same measurement units: the final evaluations of the variable (Y), concerning the analysis of the web services provided on line by the twenty municipalities, capital cities of the Italian Regions, are shown in *Table 2*.

Table 2. The overall assessment of the variable (Y) concerning the analysis of the web services provided on line by the twenty municipalities, capital cities of the Italian Regions

Italian Regions	Corresponding capital cities of the Italian Regions	(y_i) Quantitative assessment made by Radar Web PA [score expressed in 110/110 (5 points per 22 variables)]	(y_i) Quantitative assessment made by Radar Web PA compared to the maximum score obtainable (that corresponds to 110/110)	(y_i) Final score Quantitative assessment made by Radar Web PA converted into a quantitative score expressed in 10/10
Marche	Ancona	42	0,3818	3,8182
Valle d'Aosta	Aosta	64	0,5818	5,8182
Puglia	Bari	67	0,6091	6,0909
Emilia R.	Bologna	85	0,7727	7,7273
Sardinia	Cagliari	62	0,5636	5,6364
Molise	Campobasso	48	0,4364	4,3636
Calabria	Catanzaro	61	0,5545	5,5455
Tuscany	Florence	86	0,7818	7,8182
Liguria	Genoa	85	0,7727	7,7273
Abruzzo	L'Aquila	92	0,8364	8,3636
Lombardy	Milan	94	0,8545	8,5455
Campania	Naples	71	0,6455	6,4545
Sicily	Palermo	68	0,6182	6,1818
Umbria	Perugia	62	0,5636	5,6364
Basilicata	Potenza	47	0,4273	4,2727
Lazio	Rome	79	0,7182	7,1818
Trentino A.A.	Trento	59	0,5364	5,3636
Friuli V.G.	Trieste	70	0,6364	6,3636
Piedmont	Turin	88	0,8000	8,0000
Veneto	Venice	60	0,5455	5,4545
===	===	===	===	===
Average	===	69,5000	0,6318	6,3182
Median	===	67,5000	0,6136	6,1364
Modal	===	85,0000	0,7727	7,7273
Std. Deviation	===	15,2919	0,1390	1,3902
Minimun	===	42,0000	0,3818	3,8182
Maximun	===	94,0000	0,8545	8,5455

Source: Author's Data Processing.

The *Table 3* points out the registered values for the variable (X) and for the variable (Y) and the final step concerns the correlation index calculation, while the *Figure 1* presents the Radar Chart representative of the results obtained by the research: the statistical results obtained and shown in the previous Tables and Figures will be discussed in the following pages.

Table 3. Relationship between the evaluation of the websites [variable (X)] and the analysis of the web services provided on line by the twenty municipalities, capital cities of the Italian Regions [variable (Y)]

Capital cities of the Italian Regions	(x_i)	(y_i)	$(x_i - \mu_x)$	$(y_i - \mu_y)$	$(x_i - \mu_x)(y_i - \mu_y)$	$(x_i - \mu_x)^2$	$(y_i - \mu_y)^2$
Ancona	3,4872	3,8182	-3,5115	-2,5000	8,7789	12,3308	6,2501
Aosta	3,3333	5,8182	-3,6654	-0,5000	1,8327	13,4349	0,2500
Bari	3,3333	6,0909	-3,6654	-0,2273	0,8331	13,4349	0,0517
Bologna	7,1795	7,7273	0,1808	1,4091	0,2547	0,0327	1,9855
Cagliari	6,8718	5,6364	-0,1269	-0,6818	0,0865	0,0161	0,4649
Campobasso	8,3333	4,3636	1,3346	-1,9546	-2,6086	1,7812	3,8203
Catanzaro	3,3333	5,5455	-3,6654	-0,7727	2,8324	13,4349	0,5971
Florence	7,9487	7,8182	0,9500	1,5000	1,4250	0,9025	2,2499
Genoa	7,9487	7,7273	0,9500	1,4091	1,3386	0,9025	1,9855
L'Aquila	10,0000	8,3636	3,0013	2,0454	6,1390	9,0078	4,1838
Milan	8,3333	8,5455	1,3346	2,2273	2,9726	1,7812	4,9607
Naples	8,3333	6,4545	1,3346	0,1363	0,1820	1,7812	0,0186
Palermo	8,3333	6,1818	1,3346	-0,1364	-0,1820	1,7812	0,0186
Perugia	7,9487	5,6364	0,9500	-0,6818	-0,6478	0,9025	0,4649
Potenza	8,3333	4,2727	1,3346	-2,0455	-2,7300	1,7812	4,1840
Rome	9,6923	7,1818	2,6936	0,8636	2,3262	7,2555	0,7458
Trento	5,6410	5,3636	-1,3577	-0,9546	1,2960	1,8433	0,9112
Trieste	3,3333	6,3636	-3,6654	0,0454	-0,1665	13,4349	0,0021
Turin	10,0000	8,0000	3,0013	1,6818	5,0476	9,0078	2,8285
Venice	8,2564	5,4545	1,2577	-0,8637	-1,0862	1,5818	0,7459
Statistical symbols	μ_x	μ_y	===	===	$\sum(x_i - \mu_x)(y_i - \mu_y)$	$\sum(x_i - \mu_x)^2$	$\sum(y_i - \mu_y)^2$
Corresponding values	6,9987	6,3182	===	===	27,9242	106,4293	36,7190
Correlation index (r)	0,4467	===	===	===	===	===	===

Source: Author's Data Processing.

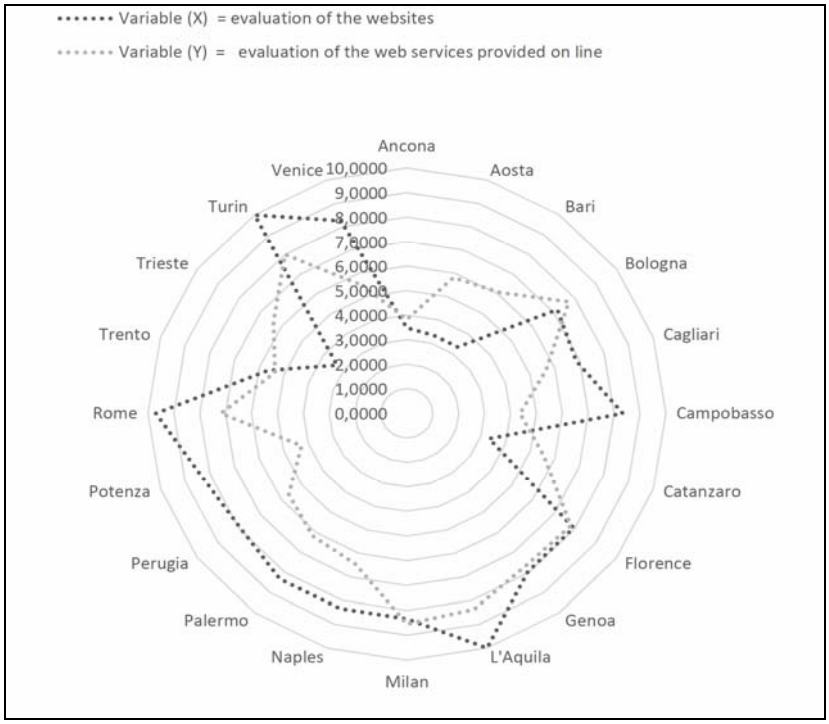

Figure 1. Radar Chart representative of the results obtained by the research
Source: Author's Data Processing.

2. Discussion and analysis

These pages are dedicated to the discussion and to the analysis of the research results: the absolute value of the correlation index – r = 0,4467 – indicates the presence of a weak link between both phenomenon observed.

From a first analysis regarding the established websites quality, observed on both detection types, it appears that an high score assigned on the websites technical standard made by W3C-MVS's tool, not necessarily coincides with a positive rating made by the Compass of Transparency.

The gap registered on some units studied (on the twenty municipalities, capital cities of the Italian Regions), could often depend on the website management: the people who run the business are different from those who take care of the website technical aspects. Although it is required a work division inside the complex realities, which classify the municipalities involved in the survey, a website management less parceled and more systemic, addressed to the common goal to increase the citizen/user' expectations, could raise the performance on the whole (James, 2011).

The approach followed in the evaluation of sites tends to highlight the biphasic action of e-government processes: on the one hand, these processes represent a right way to introduce efficiency and effectiveness in the Public Sector management (short term profile shown by the W3C-MVS's tool), on the other hand, e-government applications can have a useful effect on the ethical shared behaviours (long term profile shown by the Compass of Transparency).

The development of the e-government processes (conditioning processes or causes) determines an improvement in the governance processes of the Public Institution that – using highly technological solutions – are named e-governance processes (conditioned processes or effects) (Haque, 2001; Osborne *et al.*, 1992): the theme of e-governance includes many additional aspects, such as those of e-participation, e-inclusion, e-accessibility, etc. (Florin, 2008; Stiglitz, 2002).

Consequently, the e-governance is the second aspect of technological innovation applied to Public Administration processes: that is to say the possibilities for the improvement of the democratic participation processes offered by the new technologies: the digital revolution multiplies the individual's possibilities of communication and interaction in an exponential fashion, making it possible to re-launch the classic idea of the individual at the centre of the "*Res Publica*" (Kettl, 2000).

Following this perspective, in addition to the implementation and development of technological innovation in the Public Administrations (e-government processes), a parallel process of attention to ethics has been developed, as a related discipline (e-governance processes); some studies have sought to show how innovation is able to influence the ethical behaviour, triggering a virtuous circle, in several Public Sector fields, such as: tax evasion control, observance of the law, reengineering a public merit rating system, (etc.).

With reference to the performance assessments of the institution to manage online services – focused by the variable (Y) using the tool called Radar Web PA [or PA (Public Administration) Web Radar] – there is another weird phenomenon related to the digital divide that means "(…) *the gap between those who have computers with Internet access and those who do not, as well as the gap between those who are computer literate and those who are not* (…)" (APA, 2014).

The aspects on which depends the digital divide are various (Vehovar *et al.*, 2006), such as the infrastructure qualities, the education level, the financial conditions, the sex differences, the age, the belonging to various ethnic groups and the geographic origin. It is common knowledge that the digital divide represents a hard point for Italy: according to a

survey made by Mm-One Group (see at: http://www.mm-one.com/), the Italian web agency that examined the digital performances of citizens, companies and municipality administrations, showed a negative score for Italy, which indicates significant delays as regards European countries about the speed network connection, e-commerce (only 17% of people purchase online, compared to the European average of 45%), regular use of internet and e-government services.

The evaluations obtained in the survey about the Radar Web PA variables have been regulated on three levels: Excellent: score from 8 to 10, Good: score from 6 to 7,99; Mediocre (Poor): score from 0 to 5,99. As far as the information collected in the survey, is concerned it is clear that the excellence peaks are in the capital cities of the northern regions (Piedmont and Lombardy). Even L'Aquila shows a particular receptiveness to the issues connected to the website management obtaining excellent scores with the various measurement instruments used in the survey, but the latter case is the exception to the rule found by the search. Apart from these few examples of excellence, the situation analysed showed a poor correlation between the two variables observed: while noting modal values and averages relatively high, the same are rarely present together at a single administration.

The study, therefore, reveals a dual aspect of the digital divide phenomenon: a social digital divide and a territorial digital divide (DiMaggio *et al.*, 2001; Selwyn, 2004) and the result of the research indicates that something has been done, but much more needs to be done in Italy in the field of e-government applied to Local Public Administrations: the development of appropriate applications of e-government at this time would certainly be a strong signal of support to the Italian Nation and a significant stimulus for the economic recovery.

Unfortunately, the criticisms reported above are confirmed at the international level by the survey published by the United Nations in the field of e-government, titled "*E-Government Survey 2012. E-Government for the People*" (UN, 2012). The document is a biennial survey of the United Nations presents two international rank indexes:

- the "*United Nations e-government development index*" (EGDI)[4],
- and the "*e-participation index*"[5].

Comparing the two last editions of the EGDI published in 2010 and in 2012) Italy improves its situation going from position 38th (with EGDI=0,5800) to 32nd (with EGDI=0,7190), but unfortunately this position, it is still far from the first nations present at the apex of international ranking 2012. Also in the second index – the "*e-participation index*" – international ranking Italy shows a mediocre performance: it occupies the 22nd place (with the Nations of Czech Republic, Malta and Venezuela) overall on a full list consisting of 32 positions. The score obtained is 0,2632 / 10,0000, a value that is placed in a position slightly higher than the world average (0,2225 / 10,0000), but less than the result recorded as the European average score (0,3482 / 10,0000): this result is a further confirmation of the Italian

[4] The "*United Nations e-government development index*" (EGDI) is "(…) *a composite indicator measuring the willingness and capacity of national administrations to use information and communication technology to deliver public services. It is based on a comprehensive survey of the online presence of all 193 Member States, which assesses the technical features of national websites as well as e-government policies and strategies applied in general and by specific sectors for delivery of essential services* (…)" (UN, 2012, p. 119).

[5] The second index – the "*e-participation index*" – is presented in the UN survey in the following way: "(…) *The e-participation questions, as part of the e-government questionnaire, extend the dimension of the Survey by emphasizing quality in the connected presence stage of e-government. These questions focus on the use of the Internet to facilitate provision of information by governments to citizens ("e-information sharing"), interaction with stakeholders ("e-consultation"), and engagement in decision-making processes ("e-decision making"). A country's e-participation index value reflects how useful these features are and how well they have been deployed by the government compared to all other countries. The purpose of this measure is not to prescribe any particular practice, but rather to offer insight into how different countries are using online tools to promote interaction between citizen and government, as well as among citizens, for the benefit of all* (…)" (UN, 2012, p. 125).

delicate situation concerning the implementation of the processes of e-government under study in this research.

Conclusions

After the previous paragraph devoted to comments the results of the research, the following pages include some final thoughts on the issues developed in the article.

The first observation regards the approach followed in the multidimensional analysis applied in the study: this approach – oriented to Business Economics – allows to identify a dichotomy within the processes of e-government:

- on the one hand these processes represent a right way to introduce efficiency and effectiveness in the public sector management (short period analysis);
- on the other hand e-government applications can have a useful effect on the ethical shared behaviours, such as tax evasion control, observance of the law, reengineering a public merit rating system, (etc.) (long period analysis).

So if the processes of e-government applications represent the current instruments of New Public Management (NPM) (Aucoin, 1990; Barzelay, 2001; Maesschalck, 2004), this model appears to have a dual orientation: a managerial profile combined with a sensitivity to ethics.

Another consideration presented during the survey concerns the data analysis based on the comparison of the database obtained: this comparison between the municipalities studied allowed to prove the need to identify some standards shared by the community of reference concerning the performance evaluation under the profile of the website management, in order to start actions to promote a suitable benchmarking process.

In the particular case the self-assessment system of the website services (e.g. suggested by Radar Web PA) is an useful instrument, but – in order to proceed to more ambitious targets – it would be appropriate to have standard references at which the institutions must aim and on which setting up the website assessments as regards the consumers satisfaction concerning the services provided online.

The recurring comparison of the system with other Public Administrations (to a local or central level) should be chosen as regular working method, because releases the institutions from self-referential mechanisms and represents a good instrument to learn the best practice, identify strengths and weakness inside the organizations to better improve and to be always directed to the citizen/user satisfaction.

In prospective the contents of the research could be developed in other directions, such as the development of the model applied to the other sectors of the Italian Public Administration, or the implementation of a comparison with other Countries of the European Union, through the use of common research methodologies.

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