

# The use of detection systems to improve the quality of the Italian Public Administration

## *Extended Abstract*

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### I. INTRODUCTION

The widespread diffusion and use of innovative technology is strictly associated with the process of modernization of Public Administration (hereafter PA) in Italy. This improves the efficiency and effectiveness of the PA, the services supply and in particular the ways of interacting and communicating with the citizens through monitoring systems and feedback gathering processes.

In order to satisfy the needs of the society there is a need to be aware of the importance of the role of the citizen, whose participation in public choices must be seen as a strategic resource. It is therefore necessary, with the aim of drawing the citizen closer to local government services, to involve the citizen more in decision-making processes of the PA, while at the same time having an ongoing assessment of needs and expectations. The evaluation of Customer Satisfaction (hereafter CS) is a starting point for the carrying out of strategies of improvement for the services offered by local government. Indeed, CS emphasizes the citizen perspective, but requires tools suitable for measuring the approval of services.

### II. THE METTIAMOCI LA FACCIA PILOT PROJECT

CS is usually carried out by means of surveys, complaints/comments analysis and focus groups. These are methods which assess perceived quality periodically, but do not provide an ongoing and real time gathering of opinions regarding the services offered. There are other systems that enable a continuous and real time analysis of CS at the office counter, by phone or online, by means of emoticons. The expression of judgement using emoticons has the advantage of being simple and immediate for end-users in terms of perceiving the quality of services. Despite this method provides a not exhaustive analysis, it is usually adopted to complement with other CS methodologies.

To this end, the Italian Ministry of Public Administration and Innovation, is running a pilot project (hereafter pilot) entitled "Mettiamoci la Faccia" (literally "Let's put a face on it"), which is designed to assess the CS of the PA through interactive tools and the use of emoticons [3][2]. The pilot aims

to improve the quality of services of the PA with the help of the citizens, by detecting in real time and continuously their level of satisfaction for the services received, and allowing PAs to act promptly on the issues raised.

In the pilot, CS can be measured through services delivered by front offices, Web and phone. In particular, with regard to services provided at the front offices, citizens can express their level of satisfaction by means of touch screens connected to each front office (realizing a one to one data gathering) and kiosk systems installed in the access areas (realizing a one to many data gathering).

### III. THE IIT-CNR DETECTION SYSTEM

The Institute of Informatics and Telematics of the Italian National Research Council in Pisa (IIT-CNR) has developed a software system for all PAs taking part in the Mettiamoci la Faccia pilot. The system was developed for the real time measuring of the customer satisfaction through touch screens installed at the individual front offices delivering services. The software is available under GNU GPL licence, by accessing the website of the Dipartimento della Funzione Pubblica (hereafter DFP) - the Italian Department of Public Administration: <http://www.mettiamocilafaccia.it>.

In the implementation of detection systems, and following the DFP requirements [1][9], solutions need to ensure that:

- feedback on the service is rendered from the served user;
- a service can only be rated once;
- rating is enabled for a limited time;
- there is no possible room for manipulation by the operator;

Also, the costs of building software applications need to be minimized.

For purposes of analysis the following information may be provided:

- the number of users who have received the service;

- the number of users who have rated the service and its percentage on the total of those who have used that service;
- the frequency distributions, in absolute values and as a percentage, of the opinions expressed on the received services;
- the overall rating;
- the frequency distribution, in absolute values and as a percentage, of reasons of dissatisfaction.

Collected data related to each PA has to [5]:

- be sent periodically to the DPF in order to produce statistical analysis about CS of activities and services offered by the PAs taking part in the pilot;
- summarised in periodic reports (even daily) used by each PA for internal purpose to improve the services, and for publishing them on the PA website (at least monthly).

The detection system developed by the IIT-CNR currently provides the following functionalities:

- rating by citizens, with respect to front office services, using a touch screen monitor directly connected to the PC of the operator;
- selection of services provided by a PA operator at the front office and, consequently, enabling the user to rate the service;
- setting the maximum time to allow citizens to rate the service received;
- upgrading of the services provided by the PA via a Web Service connection to the database of the DFP, containing information on individual PAs participating in the pilot along with the services provided by them;
- generation of XML reports (eXtensible Markup Language) used for uploading data on the system managed by the Ministry of Public Administration and Innovation [6];
- submission of XML reports to the DFP via Web Service [6] [7];
- generation of reports for external display in graphical/tabular form their exportation in various formats [5].

#### IV. CONCLUSIONS

The software application developed by IIT-CNR was designed to supply a survey system of CS which is cost-effective and easy to use. The system software is now under revision to enhance it with additional functionalities. The new release will include the implementation of an interface for

evaluating the PA services supplied through the Web, and a kiosk system interface for rating the perceived quality of the services offered at the front office. The kiosk rating interface will be also accessible by the user via web and will allow the user to rate the service from home, by a given time limit. Indeed, these two additional channels are foreseen in the framework of the pilot [5].

The diffusion of online public services, in fact, requires the introduction of web-based evaluation systems of the perceived service quality, and the adoption of these tools is a starting point for carrying out improvement strategies and programmes for these services [8][9]. Also by means of the evaluation interface for the web channel, there must be a guarantee of correspondence between service user and the uniqueness of the vote given [4].

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