A Follow up to Semi-Automatic Systems for Exchanging Health Information: Looking for a New Information System at Fixed E-Healthcare Points for Citizens in Greece

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ABSTRACT

The present research is an attempt to explore the applicability of the best possible service in the area of organized health care services, at fixed predefined points of service. The suggestion is that there should be a system that will receive and provide information about health matters of general public concern. Thus following the lead of Citizen Service Centers in Greece, it can be extended conveniently to mobile devices. The main survey was conducted on a sample of Municipalities and Citizens in the year 2013. The results indicate that the new proposed system could be more secure for citizens for future use, based on supervising procedure by proper employee who will provide more help to the users, instead of a fully automatic system.

Keywords: Citizen E-Health Service, E-Bank ATM-Type Machines, E-Governance, Fixed Predetermined City-Info-Points, ICT Technologies, Research Design, Research Development

INTRODUCTION

The primary goal of this research is related to the improvement of health service to citizens. One way to accomplish this, is to develop modern, natural, and technological methods, designed for use by citizens and by Health Services as well. Thus by emphasizing on primary health care, is proposed to timely and accurately exchange health information. A second objective is related to the requirement that the required and eventually selected solutions should be economical and catering effortlessly not only for the fastest service of citizens, in the context of primary health care, but also for saving time and resources in the health sector. The third objective is the achievement of general acceptance of the project benefits, by involved people and especially by service users, as everybody is potentially patient. Moreover, this new proposed system must be secure, based on supervising the procedure by the appropriate employee who
will provide help to the users, instead of a fully automated system.

As regards the moral dimension of this research, the voluntary offer of personal information is a source of dilemmas and reflection for most people in modern society. That happens even if it is simply in the form of a medical record, which is expected to contribute further to the treatment of the health problem they might face. This is so because this kind of information considered as a patient’s personal data must be therefore safeguarded so that none account should be drifted into unauthorized hands. Therefore, there are people who are reluctant to mention their name or age. Therefore, research surveys should respect the participants’ wishes, whether they contribute to the achievement of the objectives of the research or not; mainly through the qualitative and not the quantitative value of the provided data.

This research was based on:

- The existing literature and expertise;
- Primary and secondary input data within its context;
- The use of PCs (including search engines and meta-search engines of data and information);
- The appropriate software;
- Questionnaires developed for its purposes.

Regarding the methodology followed, it focuses on random sampling field research as well as on scientific processing of collected data, on their analysis, on presentation of results and development of relevant proposals. To this end, the IBM SPSS Statistics 21 package (Gardelis, 2013) was used as it constitutes a state-of-the-art scientific tool.

The research was conducted, within three years (2012-2014), through strictly defined phases and sub-phases that cover its preparation, implementation, and completion.

More precisely, during the year 2012 and until May 15th, 2013, which was the time of preparation of the research phase, the following actions took place:

- Study of the literature and design of the stages of its preparation;
- Locating specific topics in the relevant literature and supply of the necessary electronic equipment (hardware) and the required software support for the execution of the project;
- Supply of special Web page development software Adobe Flash CS3 Professional;
- Deal with any omissions observed in terms of specialized equipment needed to perform the research and the realization of general education, as well as testing of all systems regarding compatibility and interoperability. Also, the necessary testing and simulations of the internal support systems of the general equipment were carried out.
- Development of specific Web pages required for this research.

In the execution phase, from May 16th, 2013 until January 5th, 2014:

- The collection of online questionnaires that were sent to citizens took place and completed;
- The collection of the respective handwritten questionnaires distributed to and properly completed by the participants. So, the gap for supplementing an adequate number of questionnaires to be ensured a reliable sample for the study was swiftly covered.

During the last phase, from January 6th, 2014 to January 31st, 2014:

- The processing of the data collected during the survey, was done;
- The results of this phase, were been studied and analyzed;
- The appropriate conclusions ensued for more efficient design and acceptance of the new system of Electronic Citizen Service.

At the same time, research was held in selected Municipalities of Greece in order to determine the degree of acceptance of the
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www.igi-global.com/article/soa-based-system-development-methodology/73706?camid=4v1a