ABSTRACT

Participa is a project that seeks to design, implement and evaluate ICT applications and services that support civic participation for public sector innovation. Using participatory design (PD) methods, the project will involve citizens from an early stage, with the double goal of ensuring that the aforementioned services will be tailored to their local realities while also fostering, in itself, the development of a participatory culture. It will be conducted in Paraguay, a developing country with a relatively new democratic culture. By applying PD in this particular context, we expect to contribute to the ongoing discussion about the relation between participation, ICT and development, along with an understanding of what the role of PD might be in connecting them all. We argue that the role of PD will be that of providing the methodological tools by which Participa will not only contribute to research, but it will also generate, along the way, a positive change in culture, progressively making it more participatory. For such a change to happen, Participa will need to gradually transcend its initial project conception to become a long-term initiative capable of instantiating similar participatory experiences throughout the country. In this paper, we present the details of the project, the context in which it will take place, the challenges we expect to encounter and how we think to address them to reach our overarching goals.

Author Keywords

Civic Participation, Public Services Innovation, Participatory Design

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCl): Miscellaneous.

INTRODUCTION

Having come out from a 35-years long military dictatorship relatively recently (1989), Paraguay is a country where both democracy and civic participation are still in their infancy. Since the advent of democracy, there has been a progressive increase in the levels and opportunities for civic participation [1], which in recent years took on new forms through the use of social networking channels, mainly for public protest about government corruption and the low quality of public services (e.g., healthcare, education, transportation and social security).

Public services are acknowledged as one of the leading instruments for human development [2] and, in the context of Paraguay, there is a general dissatisfaction of citizens with them, which has been patent and actively manifested through state of the art social media (such as Twitter and Facebook). One of the most prominent examples in the last couple of years is the implementation of the Bus Rapid Transit (BTR) that aims at improving the public transportation system in the capital of the country. Such project has attracted a great deal of attention from the general public, especially in what regards to the selection of the solution that fits best the needs of citizens and the budget allocated to the project. Despite the very active, online discussions of citizens on this type of matters, not much is known about the extent to which this form of participation is actually influencing the advances in the innovation of public services. Yet, citizens seem to increasingly get interested and engaged in these forms of civic participation.

Such initiatives reflect the desire of more active engagement with the public administration. Despite this general perception and good intentions, however, it seems that civic participation has not yet been effective in truly influencing policy making and government accountability. Beyond some small victories, Paraguay is still highly affected by poverty, inequality and government corruption, which altogether put at risk its ongoing development. In this context, many questions arise about what is the real level of civic participation in the country, what is its real impact in presenting the citizens needs and proposing alternative solutions for the country development, and how it can be facilitated in

1 In 2013, citizens initiated the #15NPy (November 15th) movement that led to the removal from office of a corrupt senator who was shielded by its peers: http://www.ipsnews.net/2013/11/paraguay-indignados-win-round-congress/

2 According to the latest “Social Panorama” report by the UN Economic Commission for Latin America and the Caribbean, the poorest 20% captures less than 4% of the nation-wide income [17]. Government agencies, on the other hand, report a substantial reduction of extreme poverty in the last 5 years [18], which is taken cautiously by some economists, who point out that most of the people in this group continues to be very vulnerable [19]
order to substantially improve the more general goal of human development.

The challenges and opportunities of this context motivate us to step into the topic, to contribute from our perspective of ICT researchers, designers and practitioners. Participa is our way to step in: a research and development project that aims at identifying and developing ICT solutions for empowering citizens to co-create social impact solutions and in the innovation of public services. From the very beginning, we intend to apply participatory design methodologies and involve as many citizens as we can in the process of shaping our research and design efforts. In doing so, Participa will be the first ICT research and development project to apply PD within Paraguay, which we argue will facilitate the project to transcend its initial conception and become a long-term initiative, capable of instantiating similar participatory experiences throughout the country.

In the following sections, we introduce the goals, methods and expected contributions of our proposal, followed by a brief review of related work and a discussion of our position in terms of the challenges we will face and what will be the role of PD in this work.

THE PARTICIPA PROJECT

Goals

The ultimate objective of Participa is to contribute to the improvement of the democratic life of Paraguay by motivating and facilitating its people to participate more closely in the co-creation of solutions for the innovation of services in the public sector. But also, as important as these issues, is the need to involve the main stakeholders (citizens) in order to better collect, understand and address their needs.

To achieve this overarching objective, the project will focus on building IT-based services and application that support civic participation by providing a convenient and complementary medium for it to occur. Participa services and applications will be tailored to the realities of the local communities where they will be deployed, to allow its members to work together with public institutions in order to co-create innovative solutions for matters of public interest (e.g., the public transportation system, the requalification of historic buildings and sites, the spread of the dengue disease, etc.). On one side, Participa will provide public institutions with a platform for involving citizens in creating public sector innovations and social impact solutions; on the other, Participa will foster the direct participation of the civil society in public interest initiatives. In a nutshell, the goals of the project are formulated as follows:

i) **To design and deploy participatory innovation processes** that, tailored to the Paraguayan socio-cultural context, enable citizens to collaborate with public institutions in the innovation of public services and in the ideation of solutions for social-impact problems.

ii) **To design and implement IT applications and services** that, tailored to the Paraguayan socio-cultural context, support and facilitate the aforementioned participatory innovation processes.

In pursuing these goals, Participa will also help us to extend knowledge about how technology can foster civic participation in the context of developing countries.

**Methods**

We will apply an interdisciplinary research approach based upon on-field ethnographic studies, participatory design workshops and pilot studies to experiment and test design alternatives around key public services, innovation campaigns.

We will start with on-field ethnographic studies that will focus on understanding the context and current participation practices of the target communities, along with what public service could be the best focus for an innovation campaign in that community. This will guide our understanding about who and how can be involved in the participatory design process, to avoid the pitfalls described by Heeks [3].

Once we have a clear idea about the realities of civic participation in the target community, along with what public services they see as problematic and important, participatory design workshops will be organized with members of the community to drive the design of services and applications that can motivate people to participate in a campaign for innovating the service. These workshops will ensure that the tools we build are tailored to the local reality and facilitate its later adoption.

Once the designs are ready, they will be implemented in the target communities to support the innovation campaign around the public service. These interventions will be organized as pilot studies that will help us test different applications in real contexts and to evaluate how the people and public institutions in the target communities use them. Moreover, these studies will also inform our understanding of the general civic participation phenomena in the local context.

**Expected Contributions**

By the end of the project, we expect contribute with:

a) An extension of the literature in the form of novel knowledge about computer-mediated civic participation initiatives in Latin-American communities. In particular, we plan to shed light on the problematic of deploying and running collaborative processes for public sector innovation within Paraguay and similar societal contexts.

b) A list of general public concern scenarios and priorities in which citizens are more interested to collaborate with the government in the co-creation of a solution.

c) An implementation of processes that empower the civil society to participate in the innovation of the public sector.

d) The creation of IT-solutions that are tailored to the socio-cultural context and facilitate the citizenry in collaborating with the government in public services innovations.

e) An evaluation of the proposed IT-solutions in terms of adoption, sustainability, affordability and usability for public sector innovation.
In parallel to this project-oriented contributions, we also expect Participa to become an organization capable of leveraging the know-how we will gain and the platform of services and applications we will build, to instantiate future participatory experiences that can, in turn, promote a more participatory culture and facilitate grassroots initiatives for public sector innovation, originated from its conception within local communities.

RELATED WORK

Nowadays, governments around the world are starting to take actions toward more transparent, open, inclusive and responsive administrations [4]. Improving citizen participation is one of the main concerns for moving away from today’s bureaucratic, top-down, and hierarchical democratic processes³. In this context, technology has been playing a crucial role as facilitator of citizens’ efforts in addressing public issues. Never before, public institutions and elected authorities had been able to reach and engage citizens in the cost-effective way they do today and there is an increasing number of scenarios where the individuals and organizations of the civil society, supported by the ICTs, are playing a key role in the solution of social problems [5]. Reporting infrastructure problems and analyzing large volume of public data are two of the most common ways in which citizens’ information, knowledge and experience have led to innovative solutions [6⁷].

Several governments worldwide are sourcing public deliberation and decision-making processes on opinions and ideas that come directly from citizens. Exemplary of these efforts is the experience of Manor, Texas; which in 2009 started an experimental initiative for gathering citizens’ bright ideas about how to innovate the city’s services and goods [8], which led to solutions like an RSS feed to notify residents of new construction, maintenance, and repair work; and an automatic debit system to pay utility bills online. Other relevant initiatives at a national level include: the constitution reform of Iceland in 2010, the reform of off-traffic laws in Finland (i.e., the “Finland Experiment” [9]), and the efforts of Denmark and Sweden to involve citizens in the ideation of solutions for climate change and transportation systems [10]. On a more global scale, the United Nations has recently started a campaign, supported by CrowdCity⁷, to call citizens around the world to participate in a global-scale consultation to create the successor of the Millennium Development Goals framework⁷.

In Latin-America, civic participation has taken the form of participatory budgeting experiences that originated in Brazil in the early 1990s and extended to other countries in the region [11]. With mixed results [12], these initiatives have also leveraged ICTs, although its use has been limited so far [13]. There are also several initiatives focused on the implementation of ICTs to support civic participation, like Ciudadano Inteligente⁶ and Codeando Mexico⁷.

In Paraguay, civic participation is still a novel and limited experience due to reasons we have mentioned earlier in this paper. There are, however, some interesting initiatives such as the Network of Contralor (i.e., interventor) Citizens [14], which is devoted to exercise an independent control over government authorities, denouncing corruption cases. Another initiative is the Youth Parliament, an association devoted to the promotion of participation by simulating a parliament with young volunteers who debate the same bills and issues as the real parliament. Paraguayans are also progressively losing their fears for stating their views and increasingly using social media as a channel to express their opinions. Some of governmental authorities are already looking to capitalize this situation and have started to use social media for collecting opinions regarding public interest affairs, but the experiences are still scattered and limited. Other citizen-sourcing, computer-mediated initiatives in Paraguay are NoCoTuBa³ (do not share your garbage), El buscar del pueblo⁹ (“crowdsearching” of corrupt politicians) and Aportemos³⁶ (citizen reporting application).

DISCUSSION

In the words of Martinez-Verduzzo, cited by Morel [1], participation is a key component of human development because it enables the realization of the individual in all its capacities, vocations and aptitudes. Civic participation requires and also produces a process of empowerment of the civil society [1], ultimately leading to a betterment of the democratic culture of the people and its development. Achieving participation, however, it is not an easy endeavour and, admittedly, we do not expect Participa to have a great immediate impact on civic participation in Paraguay. There are many cultural and societal issues that will challenge this project. For a start, Paraguay’s history of authoritarian governments was long, oppressive and violent, repelling and limiting all forms of participation almost half of the previous century. As a result, Paraguayans people are passive and still fearful of making their voice heard. They are not used to take part on discussions and debates and there is a general tendency towards conformity and negativity by which people usually think that the unequal and unfair social situations cannot really be changed.

There are, however, organizations and leaders of the civil society in which citizens trust (depending of where in Paraguay we are). To tackle passivity and the fearful response to participation, Participa can work with these organizations and important leaders to bring the project initiatives close to the communities. Entering the field

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³ http://www.opengovpartnership.org/about
⁴ http://crowdcity.com/
⁵ http://www.beyond2015.org/
⁶ http://www.ciadadano inteligente.org/
⁷ http://codeandomexico.org/
⁸ https://www.facebook.com/NoCoTuBa
⁹ http://www.abc.com.py/especiales/acceso-a-la-informacion-publica/consultar/
¹⁰ http://www.aportemos.com.py/
and earning trust from the citizens that we will involve in this project is the step zero of our proposal (perhaps also the most difficult one).

Another challenge has to do with the still limited ICT infrastructure in most parts of the country. There is an important digital divide that separates the urban and richer regions of the country, from the rural and poorer ones. This will mean that Participa services and applications will greatly vary from one place to another within the country. Everything from our methods, to our designs will be greatly influenced and challenged by the many different realities that we will face.

Because of the aforementioned challenge, it’s fundamental that Participa transcends its initial project orientation to become a long-term organization, capable of instantiating experiences of participatory design and innovation throughout Paraguay. Having a real impact in fostering a participatory culture, which in turns influences human development, will only be achieved with a long-term engagement with the local communities, during which many lessons will be learnt and many changes will be made to the original ideas that inspired this project.

It is key, therefore, to create a sustainable channel for participation in the shaping of our design research efforts by people in the local communities where the potential ICT solutions will be finally deployed. This implies having some level of flexibility in our research program, which might change along the process in order to respond to the dynamics of the communities. Initially, Participa can be classified as a “para-poor” kind of project [3], which entails the challenges of carefully considering the many pitfalls that participation can bring if not understood and managed adequately (who participates, how they participate, when, etc.). However, with time we hope to transition to a more “per-poor” model, whereby Participa will support grassroots initiatives of civic participation for driving public sector innovation.

As of now, there is no record of participatory design projects neither in the space of ICT4D nor in the space of civic participation within Paraguay. Participa will become the first to apply PD practices for achieving its goals. Although the project is initially presented as a design and research initiative, scoped in time and with specific expected outcomes, we hope it will later become a long-term initiative, capable of instantiating similar (and, hopefully, improved) participatory experiences throughout the country. Our position (and also challenge) is that by introducing PD practices in the context of a developing country, like Paraguay, and particularly in the domain of civic participation, the project becomes an action that will drive positive change by fostering a participatory culture. Moreover, we argue that PD in this context will facilitate a better grounding of the project into the reality of local communities, therefore answering to some of the criticisms that ICT4D (or any other “4D”) projects have faced in the past (e.g., lack of proper response to contextual and cultural problems, difficulties in achieving sustainability, lack of proper appropriation of solutions by the local communities, etc.) [3][15][16].

REFERENCES