From online to offline participation and viceversa: a software platform for new political practices

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ABSTRACT

Participatory Budgeting (PB) is a way for citizens to decide directly over the public expenditures. Every year people choose priorities and vote for concrete projects, rather than representatives and long-term political programs. This participatory process fits with the idea-based forms of online participation, but in PB they have to be "embedded" into a democratic process where the collaborative ideas are more likely to be financed than the individualistic ones. PBs can generate more social cohesion, foster citizens to live "smarter" and perhaps promote a more civic use of the web. Indeed, it also shapes the design of the web platform which supports the offline process. In this paper we present this original interaction between offline and online democracy, resulting from the enactment of the PB in four different local communities, and we outline the functionalities of a dedicated software. We finally discuss first outcomes of these early experiences, and draw some directions for future work.

Author Keywords

Participatory budgeting, online deliberation, e-democracy, e-participation, web platform, digital cities

ACM Classification Keywords

H.3.5 *Web-based services;* H.5.3 *Collaborative computing and Web-based interaction;* J.1 *Government*

INTRODUCTION

Budgeting plays a crucial role in politics: here lies a large part of power: money is the principal means for clientelism and corruption at the public level. "Follow the money" was the motto of the Anti-Mafia Prosecutor Giovanni Falcone to fight the criminality. Budgeting is also relevant in the current financial crisis: an efficient use of public resources and shared decisions are compelling goals. In the last decades, public opinion has claimed for more transparency, openness and clarity in public policies and in budget

management. New tools and new methods also emerged, especially online: social reports, open data, participatory journalism, crow sourcing are just few of the innovative solutions to date.

Participatory Budgeting (PB) is something more than a means of accountability. It is a participatory practice through which people are directly involved in the decision-making over the public expenditures. PB was born in 1989 in Porto Alegre, Brazil, after the fall of the last military regime. It was basically demanded by social movements – and invented by the interaction of the ruling Worker Party – to overcome the limits of liberal-democracy and guarantee more redistribution, social justice and social cohesion, as well as more public accountability. Because of the concrete results obtained in Porto Alegre, in 1996 the UN proclaimed PB as one of the world's best practices in local governance [2, 4]. From that moment, it has gained worldwide acknowledgement, spreading remarkably and surprisingly throughout the globe [7, 9].

Around 2002 PB landed also in Italy, but without producing large positive results. It suffered less people participation than one would expect and wish, for many reasons: the Italian strong party politics did not ever empower these processes, giving little power to citizens; therefore participation to several and long meetings was perhaps too demanding compared to the decision-making power in the hands of citizens. As result, after a booming start, PB rapidly disappeared [8].

Today things are changing. The economic crisis and the recent expansion of ICT have facilitated PB to be back on the scene. On the one hand, politicians face a deep crisis of legitimacy and governance. On the other hand, internet spreads good ideas worldwide and fosters participatory practices and behaviors among users. There is hence a growing interest by local authorities and citizens in the potential of PB. This is also true because technologies seem to make participation much easier than in the past, overcoming some of the apparently insurmountable limits.

PB has been crafted and imagined in the '90ies of last century when (and where) internet did not practically exist and the only way for people to participate and be informed was attending public meetings. Participation did never

explode then and PB did never have enough legitimacy to impose itself as an established practice in local governance, despite the excellent outcomes. Oddly enough, almost at the same time, several local communities started to take profit of the net to strengthen social ties, empower citizenship and gather civic intelligence. However, the early experiences of civic and community networks [6] and dedicated sections in the proceedings of the previous Digital Cities workshops – suffered for a lack of deliberative power and a low impact on the real-life policies and politics [3]. These two weaknesses could be finally overcome by merging the democratic deliberative practice of PB and the lessons learned from early community networks, into the new scenario of the web 2.0.

PB needs internet as it favors both the quantity and the quality of participation, includes people more and provides enough information for a better deliberation: while many cannot attend meetings and traditional media are too expensive and not interactive, the web 2.0 guarantees more *time* and *space* for citizens to be widely informed, to debate, to gain more awareness and to finally deliberate. Online collaboration on real territorial initiatives can also increase networks of social relationships within local communities, encouraging social cohesion. Finally, internet facilitates the management and the development of participatory processes. To make participation effective and PB more legitimate, the use of the web to "augment" PB is therefore mandatory [1, 5].

Internet and PB share also similar mechanisms of civic engagement. First of all, participation is flexible and it is about ideas and people are free to contribute and to vote for everything they like. This is partly true in PB, because participation is channeled into the democratic rules and it also has to take account of the economic constrains. Secondly, in both cases there is also a combination between direct and representative democracy: if people support everything they like, it includes also all valuable people who bear intelligent opinion and ideas. In any case there is a complete delegation of power, or a complete self-production of solutions, but rather there is a fluid relation among trust, self-learning and accountability, nurtured by free access and by an exchange of information.

The following case studies attempt to face this challenge: they are four initiatives of PB, implemented in Italy by a small Association, the Centre for the Study of Participatory Democracy (Centro Studi per la Democrazia Partecipativa, CSDP), in the Municipalities of Canegrate (in the Province of Milano), Cernusco Lombardone (in the Province of Lecco), Cascina (in the Province of Pisa) and the Province of Pesaro-Urbino. These projects are named, respectively: *Canegrate Partecipa!, Cernusco Partecipa!, Cascina Partecipa!* and *Più cultura!*. The URLs are: www.cascina-partecipa.org, www.piucultura.org. *Cernusco Partecipa!* is now reachable at http://cernusco-lombardone.bilancio-partecipativo.org/. *Canegrate Partecipa!* has no longer the old website and it is transferred to the new one reachable at www.canegratepartecipa.org.

INTERNET AND PARTICIPATORY BUDGETING: FOUR CASE STUDIES FROM ITALY

PB is a relatively simple process: simply speaking it consists of giving citizens of a local community the power to decide every year over priorities (environment versus urbanization, alternative energy before sidewalks, etc.), to propose projects and finally to select which project finance. They do it directly and appointing also some fellow citizens entitled to carry them on and to interact more regularly with the local authority and the grass roots. It is an informal process, as the formal power is still held by the traditional representative bodies, Mayor and City Council, which appointed to democratic legitimacy by the universal suffrage. In fact PB is usually attended by a small part of the population, between 1-5%.

The following cases stand out from the norm because they reduce the impact of formal assemblies towards a more free public deliberation and a more extended use of *crowd sourcing* facilities to collect individual preferences. They do it introducing a mix of online and offline participation.

Canegrate Partecipa! was the first experiment, started in 2008 and lasted three years, in a small city of about 12,300 inhabitants. To incline citizens towards this novelty, the participatory process was deliberately easy, something like a cultural initiative: citizens had first to make free proposals and then had to vote among those which collected more consensus during the first stage and were previously evaluated by the technical offices as feasible. They could do it through ballot papers distributed door to door and made available in many public places, or through online forms. All residents, older than 16 years old were elicited to vote; in order to participate, people had to supply online and offline the fiscal code and the personal ID. The two voting phases lasted more or less one month each and between them there was a variable time to evaluate and/or elaborate the proposals. The total budget to be spent was 100,000 euro during the first year and 150,000 euro in the second.

The use of the web was thought to guarantee widespread information and the right to vote online: it was then limited to the use of popular social network sites (a Facebook page, a Twitter account, a YouTube channel) plus a quite simple but open to everybody website: the available resources (around 15,000 euros to cover all costs) did not allow the development of a dedicated software, but just to set up a website whose content is derived , through *mash up*, from other sources like RSS, Twitter, Facebook, YouTube, Google map and calendar. An online form was finally sufficient for citizens to collect and vote on proposals. This was an early and "low cost" initiative. The deliberative process has been left offline, through citizens' assemblies and informal public debate.

The successful results (in a single year, participation doubled from 900 to 1,800 people with hundreds of proposals, over a population of 12,300 inhabitants) were rewarded by a prize offered by the Province of Milan, many public presentations and by a couple of publications. This contributed to open the way to replicate the experiment in 2012, in the three other local communities.

Cernusco Partecipa! was similar to *Canegrate Partecipa!* The budget was also similar (100,000 euro) although for less residents (around 3,800). In addition, people could also appoint a fellow citizen to make the final project to vote. *Cascina Partecipa!* was instead the most structured and the largest of the PB discussed here: it had more financial resources for the whole organization (around 50,000 euros), being funded under the Tuscany Region participation law. It included many deliberative meetings, facilitators and experts that involved delegates and a representative sample of citizens. The 45,000 residents could decide over one million euro. Because of its (financial and demographic) size, in the final vote people did not received ballot papers but they had to vote personally either at the Municipality, or at moving polling stations or online. Finally, *Più cultura* differs notably from the others: it was about financing cultural projects with 70,000 euro of budget; proposers could only be organizations, while proposals had to follow a strict announcement and be published online. All feasible projects passed the selection to be finally voted by all residents, either online or by forms available within the local newspaper.

To support the spread of the initiatives, a more solid and performing online "participatory" platform became necessary and also possible: part of the budget of each project was invested to develop it. Practically speaking, it was necessary to organizing and monitoring many different projects together, and to keep costs low. Democratically speaking, it was also important to give citizens a useful tool to be informed, to cooperate and to start producing and sharing proposals and opinions even through the web. Politically speaking, it was useful to build an open tool for everybody to know and to experiment what PB is and what it can do, in order to nurture a general consensus and interest over it.

BIPART: BEING PART IN PARTICIPATORY BUDGETING
BiPart (this is the name of the platform) launched in May 2012. After a first attempt to let the software be developed by a software house which said to be interested to collaborate for free, but then failed to fulfill the commitments, CSDP signed an agreement with another company, Maiora Labs srl, expert on e-participation software. The software was developed on schedule to support the final vote in Cascina and Cernusco and *Più cultura!* from its beginning. Despite its still prototypical nature, the ongoing interventions required and the absence of a preliminary UX study, BiPart was sufficient to guarantee an acceptable level of usability. .

BiPart is a multi-site platform which can host as many local initiatives as necessary: each site can either adopt the standard configuration or can be highly personalized, according to the specific PB project. It is developed on the LAMP (Linux, Apache, MySql, Php) suite.

The platform consists of two spaces: a community space and a deliberative or institutional space [3]. The community space is the "social" core of BiPart and is *timeless*. Registered citizens can report *problems*, define intervention *priorities*, publish *proposals* and collect supporters around each of those entities. According to the essence of PB, it aims at creating communities around single issues, transforming individual ideas into projects developed by groups of interested people. As a groupware technology, it includes forums for free debates, wikis for collaborative writing, calendar for sharing initiatives and storage for uploading multimedia documents. The relevant entities can be geo-referenced with a Google map, and tagged or associated with pre-defined categories, in order to make searching easier. Sharing features with the most popular social network sites allow groups to advertise their initiatives. This space aims at gathering "civic intelligence" (Schuler, 2001) from the crowd of citizens and enhancing social cohesion within local communities.

The deliberative space allows institutions to organize PB with well-defined schedule and budget. The administrators can customize the process by selecting the appropriate tools for each phase, so that citizens can vote for priorities, can delegate and finalist projects, and can also follow the ongoing institutional activity. A back-end feature makes it possible to insert in the tool data base all the documents and data (i.e. proposals, problems and votes) collected offline through cards or ballot papers.

The voting tool, in the client side, consists of a random list of the finalist projects, carefully presented and enriched by further documents (e.g., the official project signed by the public institution) pictures and links. Registered citizens can cast their vote no more than once. An email with a unique id is sent to the voter as a receipt. On the server, side, an appropriate fair voting algorithm [10], selects projects to finance according to their cost. Votes are considered like money of the budget that citizens assign to project(s) they prefer. Projects that get more votes/money than they require are financed and then implemented.

EARLY OUTCOMES AND FUTURE WORKS
The renewed interest on participation and on PB by several municipalities in Italy, and the parallel raise of the web as a participation platform, inspired the development of a dedicated software, called BiPart, for supporting PB initiatives. The paper briefly presented four PB' cases and the main functionalities of BiPart. Table 1 summarizes the participation data in the four cases. Data of *Canegrate Partecipa!* come from the last PB, in 2010/11.

PARTICIPATION PLACES	RESIDENST)	PHASE I PROPOSER (ONLINE/TOT)	PHASE II VOTERS (ONLINE/TOT)
CANEGRATE	12,431	74/653	85/1,220
CERNUSCO L.	3,863	66/238	65/550
CASCINA	44,133	118/2,300	889/1,550
PESARO-URBINO	366,935	---	1024/5,780

Table 1: Participation in the four PB initiatives

Unfortunately, being at an early stage and because of the lack of time and resources, BiPart still does not provide logfiles and statistics: priority was given to develop front-end and back-end features. Moreover, since three of the four filed tests have recently finished, participation data are still partial. They come from public report and broad information available online and partly from the database queries. Notwithstanding, these early data provide useful insights.

Compared with the general trend [8], participation in these experiments was quite relevant. As participation in the second phase (voting) of PB usually is higher than in the first step, and although the total number of the people involved in both phases would be surely greater than in a single phase, we only took data from the second stage. Therefore, if we exclude *Più cultura!* (whose PB was too different from the others), in Cernusco Lombardone, Canegrate and Cascina almost 14%, 10% and 3,5% of the residents voted, respectively.

If we look in detail, online participation plays a relevant role in increasing the number of people involved. Cascina is the field test where citizens took more profit of the online facilities: in particular, more than the 50% voted online (889 over 1,550). This was probably because offline procedure was more severe than in the other PBs: since ballot papers were not handy, many people used the online vote.

These experiments have been interesting field tests to analyze the interplay between the online and the offline participation. Online participation was quite high, if we also consider the underdeveloped platform. Likely, some of these initiatives are still going on and perhaps new ones will start. BiPart is also constantly under development and improving, and new functionalities are being added, but it is now almost completed. A new user interface has been recently studied and implemented to increase user experience. Aim of the CSDP is to promote the use of internet facilities among citizens, side by side with participatory democracy. Therefore, the next step will be to take advantage of these ongoing projects to provide the scientific community with new and more detailed primary and statistical data.

PB is a new approach to democracy which seems to encourage participation [11]. The use of e-participation tools and sites seem also to improve people involvement. The interplay of PBs and internet can hence be a also good field test to design and verify new and existing internet tools and online participatory dynamics.

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