FOSTERING COMMUNITY ENGAGEMENT THROUGH CROWDSOURCING: CASE STUDY ON PARTICIPATORY BUDGETING

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Abstract

Crowdsourcing in urban governments is defined as the use of new technologies in order to take advantage of citizen knowledge to find solutions to municipal problems. Driven by the constant technological advances and ubiquitous Internet connection, the crowdsourcing platforms are proving to be valuable tools for triggering and engaging the public towards active participation. In this article, we present the emerging role of crowdsourcing in urban administration and illustrate an example of a case study on how crowdsourcing fosters citizen engagement. The case study shows that crowdsourcing leads not only to deeper civic engagement but also to better public decisions.

Keywords: Civic Engagement, Crowdsourcing, Participatory Budgeting

1. INTRODUCTION

Citizen´s engagement is considered as one of the important dimensions for the development of smart city (Boukhris et al., 2016), which is a new city model resulting from the rapid development of new technologies and innovation processes. According to Gooch et al. (2015), smart cities must focus on people rather than on technologies, or better, as stated by Desouza and Bhagwatwar (2014), to use the potential of technologies to foster citizens´ engagement by deploying of technology-enabled participatory platforms for civic engagement.

In this context, the notion of the wisdom of the crowds (Surowiecki & Silverman, 2007) has gained the importance. Crowdsourcing enables public officials to work outside the traditional structures (Dirks & Keeling, 2009) and engage citizens in innovative ways such that local issues are resolved without causing much strain in their resources (Desouza & Bhagwatwar, 2014).

Here we report on progress made towards crowdsourcing initiative deployed in the Czech Republic, focusing on participatory budgeting practiced in the city district Prague-Zbraslav. In this article, we explore the role of participatory budgeting in encouraging citizens to contribute to important local issues through crowdsourcing.

2. CROWDSOURCING TO FOSTER COMMUNITY ENGAGEMENT

Crowdsourcing is a term coined by Howe (2006) referring to the process of outsourcing a task to the crowd – an unknown group of individuals, non-experts or experts, acting as volunteers. Despite this concept has primarily been developed in the field of business, it can be used as a particular form of citizen participation in the public policy process (Brabham, 2008), (Brabham, 2009).

The e-participation is one of the e-government services. As stated by Teşu (2012), these are key tools for improving urban management, where a higher level of e-government services development is needed in order to deepen and enhance the quality of the interactions between public administrators and the citizens.

Citizen e-participation in urban governance is defined by Silva (2014) as the ubiquitous use of information and communication technologies to support citizen involvement in the urban policy process, in its different stages, without limits of time and space, through processes of information, consultation or active participation, being crowdsourcing in urban governance a specific mode of active e-participation.

As stated by many scholars (Macintosh, 2004), (Fung, 2006), (Albrecht et al., 2008), the value of e-participation is closely linked to the level of citizen engagement.

The move from off-line and paper-based urban governance to a mode based largely on digital and online environments requires new working methods and new tools (Silva, 2014) such as innovative Web 2.0 applications (Casey & Li, 2012), user generate content applications, citizen consultation platforms, central portals for petitions, social computing platforms, geo-visualization and geo-location technologies (Anttiroiko, 2012), and mobile applications (Sundstrom, 2012). Although these tools are now opening new channels and possibilities for communication between citizens and government, offering new possibilities for data collection, information and consultation in urban governance, many scholars (Moody, 2007), (Sieber, 2008) agree that they should not be seen as a replacement of conventional modes of citizen participation in urban governance, but rather as a complement to traditional participatory methods and tools.

Although in most cases e-participation is part of a wider participatory process that also includes non-virtual and off-line activities, the tendency seems to be for public officers to use little by little the new e-participation tools as they allow simpler, inexpensive, less time-consuming and more effective way of interaction with citizens, and thus foster citizen engagement in urban governance (Silva, 2014).

In the remainder of this paper, we outline how crowdsourcing tools are being used to foster community engagement in the Czech Republic. This is presented using case study.

2.1. Crowdsourcing for Participatory Budgeting

Participatory budgeting (PB) is a form of active civic engagement that enables citizens to participate in budgetary decision-making processes. It serves as an instrument by means of which citizens are capable of deciding on the projects in which the public money will be invested (Boukhris et al., 2016), and thus directly influence the allocation of public financial resources. As PB empowers citizens by providing them with the mechanism to express their preferences and opinions, it contributes to civic engagement (He, 2011). This is confirmed by Garcia et al. (2011) who state that as people feel their suggestions and demands are heard by the government, their actual desire to participate will increase.

Simultaneously, many scholars agree that PB has the potential to change the relationship between local government and citizens in favour of the latter. In the context of PB, citizens have greater feelings of access to a local government, and a better understanding of the complexities of spending public funds. This leads to a more positive view of government officials and bolsters the legitimacy of local government (Swaner, 2017). Citizens not only become familiar with public finances´ operations but also exercise control over local authorities which helps bridge the distance between them (Soltysiak & Suraj, 2016). PB is viewed as an instrument for introducing local democratization as well (He, 2011). According to Brun-Martos and Lapsley (2017), the idea of PB has the potential to enhance both democratic accountability and effective city management through transparency. It allows the enhancement of social inclusion, and thus the development of civil society (Soltysiak & Suraj, 2016).

The PB in Czech communities is still in its infancy. However, there are some city leaders who decided to modernize the established practice and provide citizens with greater transparency by inviting them to the budgetary activities. One such as the city where PB is operating is Prague-Zbraslav.

3. CASE STUDY OF PARTICIPATORY BUDGETING IN PRAGUE-ZBRASLAV

City district Prague-Zbraslav joined the pilot project called the "Participatory Budgeting – an Innovative Tool for City Hall Dialogue with Citizens" in 2015. The initiative was successful. Therefore, one year later the city representatives decided to build on the experience of the pilot year, set more courageous goals, and allocate 1% of the municipal budget (1 million CZK) to projects designed by community members. As the city representatives wanted to make it easier for participants to share ideas about the projects, enable community feedback, ensure safe registration, and give the opportunity to vote online, they have used the D21 digital voting system. The city hall at first launched the information campaign through the Internet, local newspaper, and outdoor promotional areas. The aim of the campaign which culminated in September at a public meeting was to explain what is expected and how to proceed with

the process of drafting and submitting proposals. By the end of October, citizens could submit their ideas either electronically, or in a paper form to the registry office of the City Hall. In total, 19 proposals were submitted, each being analysed with respect to their feasibility and expensiveness. The public discussion, during which all feasible proposals were presented to the public, was next. Finally, the public vote through the voting application was realized. The application was accessed through the web, where all the proposals were described in detail. The voters were able to vote during February for any proposal, each having four positive and two negative votes. Citizens without Internet access were able to vote physically with the help of the public officers at the City Hall. Voting results were published on the web, further via other media, and send by e-mail to those who leave their e-mail address in the voting application. Immediately after announcing the winning projects, the City Hall started in cooperation with the designers, to prepare the realization itself (Agora-CE, 2017). In total, 1 556 citizens were involved in the vote, and they have chosen 5 from 13 originally submitted proposals (see Table 1 – The Submitted Projects). Concerning the voters, only one quarter declared that they live and work/study in Prague-Zbraslav, while 47, 8% of voters live in Prague-Zbraslav but work/study elsewhere. The most represented age group were citizens aged from 31 to 40 years (31, 9%), followed by 41 – 50 (21, 5 %) and 21 – 30 (17, 4%) years old. The number of female voters (56%) predominated.

TABLE 1 – THE SUBMITTED PROJECTS SOURCE: DEMOKRACIE 2.1 (DEMOKRACIE2.1., 2017)

	Votes in total	Positive votes	Negative votes	Costs (CZK)*
Outdoor workout course	**684**	**709 (46%)**	**25 (2%)**	**250 000**
Fixing community road	**470**	**557 (36%)**	**87 (6%)**	**248 000**
Outdoor table tennis tables	**419**	**473 (30%)**	**54 (3%)**	**186 000**
Public park water fountain	**411**	**440 (28%)**	**29 (2%)**	**50 000**
Children's playground	**295**	**341 (22%)**	**46 (3%)**	**250 000**
Restoration of historical bell tower	245	282 (18%)	37 (2%)	128 241
Barrier-free entrance to the senior club KLAS	244	319 (21%)	75 (5%)	136 750
Planting out the centre Záběhlice	176	253 (16%)	77 (5%)	250 000
New benches near market place	145	310 (20%)	165 (11%)	100 000
Community composter	144	218 (14%)	74 (5%)	40 000
Clock on children's playground	87	194 (12%)	107 (7%)	163 000
Public weather station	17	155 (10%)	138 (9%)	30 000
ProzoMAT**	- 222	71 (5%)	293 (19%)	100 000

*Price including VAT

** ProzoMAT is kind of outdoor jukebox with regional Zbraslav prose and poetry

The most successful project was the construction of the outdoor workout course, which received 684 positive and 25 negative votes. The statistics show that while 46% of citizens voted for the winning project, only 2% declared against this project. The second winning project was fixing of about 350 meters long damaged community road. This project received 470 positive (represented by 36 % of voting citizens), and 87 (represented by 6% voting citizens) negative votes. The third most successful project was the construction of two outdoor table tennis tables decided by the vote of almost one third (419) of voting citizens (D21, 2017).

The total costs of realized projects were 984 000 CZK. The city representatives, who earmark 1 million CZK for the participatory budgeting initiative, were satisfied with the results. As stated by Filip Gaspar, the Deputy Mayor of Zbraslav: "Not only record number of projects was submitted, but twice as many people joined the poll than last year." (Joachymstál, 2017) Moreover, as the number of citizens involved in the project doubled comparing to the previous year; the city representatives state that the participative budgeting initiative has been a great success. They also claim that the project showed that the cooperation between city hall and citizens can be fruitful, all highlighting that the purpose of the participatory budget is to attract the citizens to the dialogue and show them how they can actively participate in the formation of the city.

The participatory budgeting initiative in Prague-Zbraslav is recognized as an example of good practice which can be used as an inspiration for urban managers not only in the Czech Republic but also beyond its border.

4. CONCLUSIONS

This paper´s assumption is that crowdsourcing helps to develop alternative ways for public participation, encourage open communication between citizens and decision makers, and thus foster civic engagement. The goal of this article was to outline how city district Prague-Zbraslav in the Czech Republic interacts with their citizens by way of crowdsourcing. We explored the potential role of crowdsourcing technologies, namely voting and mobile apps, in encouraging citizens to contribute to important local issues such as participatory budgeting by providing an effective computational support to participatory collective decision-making.

The results of our case study show that participatory budgeting not only opens new channels of communication among residents and local officials but also forge a collective communal identity among those who participate. What is more, it has been shown that the participatory budgeting can be more creative than normal urban bureaucratic process.

The outcome of this article, based on the case study from The Czech Republic, suggested that crowdsourcing could facilitate participative processes and has the potential to significantly contribute to the openness and accountability of decision making. The results obtained show that the crowdsourcing initiatives have been able to foster civic engagement and provide useful input data not only to public officers but also to citizens themselves.

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