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URBAN CHANGES AND CITIZENS' ENGAGEMENT BY USING DIGITAL MEDIA

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Abstract: New media and digital communication tools give an authentic voice to citizens, allowing them not only to be better informed, but also to be initiators of social change. Relatively new concepts related to digital communication tools that are extensively used in business and brand communication (co-creation, digital storytelling, virtual worlds or gamification) have to be considered from the perspective of engaging citizens in urban planning, design or urban regeneration projects Three international case studies are briefly described as examples of good practice for a creative and innovative way of using digital media tools for engaging citizens with theirs cities.

Keywords: participation, engagement, digital communication.

1. Introduction

Participation and civic engagement are strongly related to contemporary urban studies, and these behaviors can break down or reinforce social differences between people (Silver, Scott, & Kazepov, 2010). Citizens behave according to their esteem or self-actualization needs, which include active interest in participation in city government and manifestation of democratic citizenship (Kopackova, 2019). Transparency and citizen-centric approaches need for tools and instruments for facilitating the engagement between citizens and the government (central or local). Some European funded initiatives like European Capital of Culture valorizing citizens' engagement as one of the main criteria for awarding the title (Nechita, 2015; Migdalovici & Nechita, 2014). Regarding urban design and physical planning, engagement of citizens could refer to different issues, such as regeneration and development strategies, or solutions to specific problems such as traffic congestion.

Digitally mediated civic engagement could be found in very diverse forms, from organizing physical protests using social media, digital hackers of public institutions, to using mobile apps to access and coproduce government services, to using digital debating platforms (Gordon, Baldwin-Philippi, & Balestra, 2013). By creating virtual public places, new technologies can allow dialogue among citizens and between citizens and decision-makers in local communities (Aurigi, 2005). Online participatory activities

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where the younger generation are more active involves the production of original content (video, images, and text), and their engagement with new digital media is raising forms of digital social capital, as they become engaged members of the community (Cohen, Kahne, Bowyer, Middaugh, & Rogowski, 2012). At the same time, young citizens also tend to be the ones who are most likely to express a disengagement from politics and the public sphere (Dahlgren, 2011).

As urban planning practices unveiled a substantial gulf in citizen participation and engagement, digital media facilitates new forms of social interaction, providing new opportunities for citizen participation aiming to influence public decision-making systems (Damurski, 2012). Digital media and visual, digital and media literacies can be key facilitators of engagement with public space (Gerodimos, 2018).

2. Conceptualization of Citizens' Engagement and Participation

Rowe and Frewer (2005) defined public engagement as a process of acquiring all relevant information from sources (all relevant members of the population) and transfer this to sponsors or participants (relevant recipients). This approach seems to give to the public (or citizens) a more passive role of sending and receiving information, and not being involved in planning or *doing* activities.

Gordon et al. (2013) defined civic engagement by three major categories: (1) acquire and process information relevant to formulating opinions about civic matters, (2) voice and debate opinions and beliefs related to civic life within communities or publics, and (3) take action in concert and/or tension with social institutions such as political parties, government, corporations, or community groups.

The distinction between citizen-initiated and administration-initiated participation is defined by the Häyhtiö and Rinne as (2008) "actionists" and, respectively, administrational approaches, as "in the administrational approach public authorities are involving citizens in decision-making, but contrary to this the citizens in the actionist approach are active somewhere other than in the traditional sphere of institutionally organized participation". Agostino and Arnaboldi (2015) made the distinction between "public communication" (unidirectional use of social media) and "public participation" (bidirectional approach promoting dialogue).

Arnstein (1969) explained in a very suggestive and graphical way that the level of participation of citizens is ranging from low to high in an 8-level "ladder of citizen participation". The first two ladders, "Manipulation" and, respectively, "Therapy" are non-participative and the role of governments (national or local) is to achieve public support through public relations. In contemporary context, the role of digital media is very important. The "Informing" is the first step toward participation, and "Consultation" represents a step toward full involvement. "Placation" means that citizens start to have some degree of influence by attracting some representatives of the citizens onto committees for advising or planning, but power holders have the determinant role. At the "Partnership" level, power is redistributed through discussions between citizens and power holders, and planning and decision-making responsibilities are shared in joint committees. For the "Delegated power" level, citizens are holding a

clear number of seats on committees, having delegated powers to make decisions, and power-holders need to negociate when differences occur. At "Citizen Control" level, citizens manage the process of planning and policy making without intermediaries.

The perspective of engaging citizens in urban planning *for* the people toward planning *with* and *by* the people is equivalent with the marketing and management approach to involve customers and consumers in developing products designed for them (Ashtari & de Lange, 2019; Kaulio, 1998). Stakeholders engagement and community consensus require public participation in projects ranging from urban regeneration and development, public transport projects, climate change related, health-care policy, water and energy infrastructure projects, and planning processes (Leyden, Slevin, Grey, Hynes, Frisbaek, & Silke, 2017).

Community participation at different degrees of decision-making processes enables positive influence on members of the community (Zhang, Matsuoka, & Huang, 2018). Other authors describe models for engaging citizens in distant decision making which were created in order to bridge the gap between them and decision-makers from their region, which they have elected (Scherer, Wimmer, & Schepers, 2012). The adequacy of the new economic elite's mutual interest in the local urban specificity, reduces the social distance between the rest of the citizens and the members of the elite, creating for the latter, the premises for reassuming their status of city dwellers, with their afferent loyalties and responsibilities (Sorea & Meseṣan-Schmitz, 2015).

ICT-enabled tools can transform urban planning, decision and policymaking processes by adopting participatory governance model (Khan, Ludlow, Loibl, & Soomro, 2014). For engaging people with shared problems, it is essential to make them perceive themselves as part of the urban fabric, and digital media have a great importance in this issue (De Lange & De Waal, 2013). A broad engagement emerges if virtual connections manifest themselves in real space by using both online and offline engagement tools (Kleinhans, Van Ham & Evans-Cowley, 2015).

3. New media - Enhancer of the Citizens' Voice

Day and Schuler (2004) emphasized the role of new technologies and the Internet in the processes of social transformation. Online engagement minimizes the limitations on participation specific to the offline world (Jensen, Danziger, & Venkatesh, 2007), but other early studies on the subject concluded that effects on civic engagement are limited (Ferber, Foltz, & Pugliese, 2006; Scherer, Wimmer, & Schepers, 2012). It was recognized that new communication technologies could provide access especially to young adults and produce increased motivation of the disinterested and disengaged ones, as negative impacts (fragmentation, manipulation, consumerism, dominance of entertainment over public affairs, the information overload) were identified even two decades ago (Delli Carpini, 2000).

It is very important to define online engagement, as some authors define it, as the engagement with online communication tools and being measured in terms of number of fans, average likes, comments, and shares of posts (Lev-On & Steinfeld, 2015). Other authors identified four levels for social media-based citizens-government relationship:

information sharing, interaction, coproduction, and self-organization (Falco & Kleinhans, 2018). Citizens' digital skills should be considered when choosing the best online participatory tools, and smarter cities should take into account capacities and needs of their communities when adopting new participatory technologies (Afzalan, Sanchez, & Evans-Cowley, 2017).

From the perspective of electronic participation (*e-participation*), Kim and Lee (2012) revealed the following three positive associations: "1. between e-participants' satisfaction with government responsiveness and their perceptions of influencing government decision making; 2. between e-participants' perception of influencing government decision making and their assessment of government transparency; 3. between e-participants' assessment of government transparency and their trust in the local government".

3.1. Websites and social media

Using websites as communication tools encourages citizen civic engagement (Coleman, Lieber, Mendelson, & Kurpius, 2008). On the other hand, social media represent a powerful tool in reinforcing the role of both public communication and public participation (Agostino & Arnaboldi, 2015). Recent research on citizen engagement and social media stressed that the communication content has a strategic role in the involvement of citizens, especially when it focuses on emotion and sentiment (Marino & Lo Presti, 2018). Sáez-Martín, Haro-de-Rosario, & Caba-Perez (2014) revealed the importance of social media in the local authority context, by establishing a direct link between democratic participation, mediated by Facebook and Twitter, and the development of smart cities.

Social media efficiency is enhanced by storytelling. All storytelling begins with listening, rather than talking (Andersson, Solitander, & Ekman, 2015). One good strategy to enable the efficiency of digital stories is to find the support of ambassadors of the case. The concept of ambassadors for supporting different causes is not new, and their role was described even for offline context and for the business sector and consumer brands as being able to get access to target groups that otherwise cannot be reached (Andersson & Ekman, 2009).

3.2. Participatory apps

Virtual and augmented reality apps for urban planning and public participation have been also investigated by the researchers (Doyle, Dodge, & Smith, 1998; Al Kodmany, 2002; Khan et al, 2014). Ertiö (2015) identified about 100 urban governance apps, and included 35 of them in the sample because of displaying at least one of the following five criteria: 1. Relevance for urban planning - apps dealing with master plans, zoning, strategic and development plans; 2. Geographical distribution; 3. Multiple roles of citizens- apps where citizens can retrieve information, generate content, and even create their own apps; 4. Ecosystem of participation - besides citizens, also local governments, agencies, research institutes, and NGOs actively involved in apps development; 5. Transferability - the capacity of the local apps to be replicated on a larger scale.

3.3. Gamification

Gamification is a concept that when applied it manages to empower rather than manipulate people, and which supports durable civic engagement (Devisch, Poplin, & Sofronie 2016). Ashtari and de Lange (2019) studied the relationship between civic skills and games, and described how using playful digital media as participatory tools make citizenship subject to *experimentation* in addition to actualization. As Deterding, Dixon, Khaled and Nacke (2011) defined it, gamification is the use of game design elements in non-game contexts. Gamification implies adding game-based elements (story, challenges, feedback, rewards etc.) to learning content (Kapp, 2012), and examples of games simulating urban planning processes are "Metropolis", "Community Land Use Game", "SimCity", "Sprintstad", "City-One", "Next Campus", and "Marine Spatial Planning" (Devisch et al., 2016; Mayer, Bekebrede, Harteveld, Warmelink, Zhou, van Ruijven, ... & Wenzler, 2014).

Gamification is often applied in participatory urban planning by using game elements to enable citizens to debate or give feedback on specific plans and to propose ideas for small-scale projects (Ampatzidou, Gugerell, Constantinescu, Devisch, Jauschneg, & Berger, 2018). As a limitation of using gamification and serious games for citizens' engagement for urban planning, Ampatzidou et al. (2018) stated that "the researches, planners and policy-makers do not make a clear distinction between games and gamified applications and use these terms interchangeably, which leads to a certain fuzziness in the practices they adopt and which often results in either disappointment, or the exclusion of such tools from the participatory process".

4. Case Studies

4.1. Hub2 — Boston, Massachusetts, 2007

Using a framework called IDEA (Imagine, Design, Engage, and Activate), the project directors of Hub2 developed a partnership between Emerson college and City of Boston in order to engage citizens in urban planning by using Second Life for enabling local neighborhoods "to participate more meaningfully in the design and development of their own public spaces" (Gordon & Koo, 2008). The process aims to explore, understand, and contribute to the design of a diversity of city spaces. The participants engaged with other avatars in the designed space on Second Life and tested the space's usability and esthetic qualities. The focus was on open space areas (eg. city parks) where participants manipulated urban landscape, and giving feed-back of others' work with flags placing. Final output of the project included posters, videos, and a public presentation at the Mayor's office (Evans-Cowley & Hollander, 2010).

4.2. FixMyStreet.com

Local governments from the UK made a lot of investments in ICT almost two decades ago to improve public service delivery. Central government aimed to engage communities and citizens in service design and delivery (King & Brown, 2007). FixMyStreet.com is "one of the first citizen-driven systems for local public service improvement in the UK that enables citizens to report, view or discuss local problems

such as graffiti, fly tipping, broken paving slabs or street lighting, and to track their resolution by the local government". The system went live in February 2007, and in its first six months managed to attract over 3000 problem reports. In 2010, FixMyStreet was closely integrated with *The Guardian* newspaper's Guardian Local project. Local councils increasingly recognized especially those progressive adopters of digital services, with a particular focus on making sure that all the different parts work well together.

4.3. Community PlanIt

As the official website describes it, Community PlanIt is "an online game platform that fosters deliberation and civic participation in planning processes to engage as wide and diverse a group of stakeholders as possible". This tool collects data that allows users to be involved in the planning process. The challenge of the game is to make players earn influence in their community by funding local projects. Each game includes an offline community event, where the results of the process and next steps with curators of the game and other decision makers are discussed. Citizens were challenged to complete tasks for the game formulated as missions and questions related to their neighborhood (Gordon et al., 2013).

As an online game, Community PlanIt "guides constituents through the narrative of the planning process, creating opportunities along the way for learning, civil conversation, and meaningful input". The most important results that have to be mentioned are: 1. 10,000 people across a dozen cities that played the game; 2. usage in a wide array of contexts that go well beyond city master planning, like setting public health priorities in neighborhoods, addressing waste-water management at the regional scale, or tackling the issue of youth unemployment in developing countries at the national scale.

5. Conclusion

Internet and digital media tools transformed the relationships between citizens and authorities on issues regarding urban changes and planning, and other policymaking processes by enhancing the adoption of a participatory governance model. Even though Mihailidis and Thevenin (2013) stated that traditional metrics for engagement (voting, attending town meetings and civic groups) started to erode because of new media influence, participation in online communities is still one of the most notable instances of reinventing active citizenship. To exemplify the effect and influence of digital tools used by citizens on urban changes, Visan (2011) described a Romanian initiative that shifted online protests from blogs and forums to the street, community and the media. Fromm (2014) indicates that horizontal communication combined with lowered barriers to access have the potential to give voice to a marginalized population, especially the youngsters and transforming them from *mediated into mediators*.

Digital media technologies can increase citizen involvement and empower them to act collectively using social media (Shirky, 2008), or stimulating collective reflection over spatial issues in order to come to a shared understanding of these (Devisch et al., 2016). It is very important to create frameworks for allowing local authorities to define and

develop urban services together with their citizens and involving them in urban changes, and digital tools allow a better cooperation in finding the optimal solutions. Citizens become more like customers, as they become co-creators or partners actively engaged in creating what is valued by the public (Bonsón et al., 2014), and digital media is an ideal environment for the co-creation process on urban changes issues.

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