

## Chapter 8

# Digital Community Planning: The Open Source Way to the Top of Arnstein's Ladder

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### ABSTRACT

*Citizen participation in planning as a decision-making and future-oriented activity is still in the hands of government. New advances in Information Communication Technologies and community informatics have allowed new forms of e-participation and e-planning to emerge. The article refers to theories of social psychology and digital rationality to support the use of ICTs and Web 2.0 in planning as means to deliver more meaningful and independent participatory processes. Moreover, it looks into different planning approaches to and theories of participation to argue and conclude that a digital community and plural planning approach may provide communities with a better setting to move up Arnstein's ladder of citizen participation. The article presents three different open source software and one proprietary software which can be used in practice by citizen groups to produce planning documents. Based on these findings, future research will explore the application of the approach and tools in an urban setting in close collaboration with grass-roots and citizens organizations.*

### INTRODUCTION

Citizen participation has long and widely been discussed in planning, public policy and public administration literature (see e.g. Davidoff, 1965; Arnstein, 1969; Fagence, 1977; Day, 1997; Forester, 1999; Wagenaar, 2002; Healey, 2006). As Arnstein (1969; p.216) put it, “no one is against it in principle because it is good for you”. The problem with citizen participation in planning is both theoretical, or philosophical, and empirical. From a theoretical point of view, it concerns theories of democracy, representative, deliberative, participatory and direct democracy for example, redistribution of power and the ability to influence decision making and the contested concept of the public interest (Fagence, 1977).

From a contextual point of view, it has to do with elements such as: nature of planning agency and its functions and activities, structure of the organization, legislation and regulations, resident population

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(Day, 1997). Participation is in many cases required by law or simply by political culture, but it can be extremely hard to get citizens involved, especially lower-income ones (Peattie, 1968). People may not want to get involved, may not have time, may feel underrepresented, that delegation through voting is enough to guarantee their needs, that they have no influence on decision-making and on policy-makers. Within the literature, despite the complexity of the issue, it has been stated that there are various advantages connected with and intrinsic to citizen participation and involvement in the planning process and government decision-making in general. The advantages range from a better understanding of the problem to tailored solutions and more accepted outcomes, building of a wider consensus, self-transformation of values and preferences, reduction of hostility and increased public trust towards government (Forester, 1999; Irvin & Stansbury, 2004; Agger, 2012). Participation is desirable also in consideration of the innovation, ideas and solutions to a specific problem that might come from outside the planning agency as it happens in business strategies of open innovation such as crowdsourcing (Seltzer & Mahmoudi, 2012).

Limits to and downsides of citizen participation in decision-making have also been widely discussed in the literature. Citizen-participation programs might serve a marketing purpose (Irvin and Stansbury, 2004, p.57); routinisation of citizen participation may reduce the public pressure for reform; it can be costly and time consuming; there can be less resources available for later implementation stages; and so on (Russel & Vidler, 2000).

Lisa Peattie (1968, p.80) argued that “planning initiative on the part of individual groups and communities within urban areas has been made necessary by the increasing bureaucratization and technical basis of decision making in planning and current urban society”. This argument finds even more solid ground 48 years later in the light of ICT improvements that make current society’s technical basis much greater than it was in the past. Decisions on public spending in matters such as health, housing, transport, education, environment and so on are increasingly based on data and information that are not - or were not - available to all and easily understandable. In such a framework, planning is no exception when it comes to land use decisions; taking and compensation of property rights; public transport means and accessibility measures; housing needs; GIS software use; environmental issues and so on. However, new and recent developments in open-data, open-government and Information Communication Technologies (ICTs) allow new frontiers to be explored and new tools to be adopted. As Klosterman (2012, p. 1) points out, the development and use of computer technologies in planning began in the 1960s with “efforts to develop computerized models of the city.” Application of computer technologies to urban planning has evolved over the years together with the shifting perspectives of urban planning from expert-oriented planning to greater public involvement (Foth et al., 2009). Currently, ICTs and communication technologies (Web. 2.0 services, blogs, new media and so on) have contributed to modify the practice of urban planning and to the emergence of new forms of e-planning and e-participation (Silva, 2010 & 2013).

Use of new and diverse technologies within participation processes is able to produce positive outcomes, even though difficulties and constraints are also associated with their use. For example, new ICTs – mapping technologies, Public Participation GIS (PPGIS), blogs and social media, websites, online discussion forum, decision support systems, planning support systems and simulation technologies – allow for the enhancement of aspects such as: sharing of information; empowering of local citizens; producing new alternatives; promoting dialogue between participants and between these and professionals; collecting feedback and information; increasing numbers of participants by removing barriers to participation as people may feel more comfortable in expressing their opinions; and opening new channels for participation (Innes, 1992; Healey, 1998; Forester, 1999; Al-Kodmany, 2001; Elwood, 2002; Slotterback, 2011; Aitken, 2014; Eräranta, Kahila-Tani and Nummi-Sund, 2015). Anttiroiko (2012) suggests that new Web

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