

# Optimizing Public Participation through ICT and Social Networks: Questions and Challenges

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## 1 ABSTRACT

Since the 90's, urban planning education, integrated with information communication technologies (ICT), has attributed great importance to training using communicative approaches, producing great enthusiasm which has been manifested in many experiences (Mitchell 1998; Talen 2000; Batty et al. 2003; Steinman et al. 2005). For the supporters of this experimentation (Kwan 2002; Sieber 2004) and increasingly strong scepticism (Angotti 2011; Craig et al. 2002; Esnard et al. 2004; Harris et al., 1998; Pickles 1995; Warren 2004), the issue of citizens e-participation in decision-making still remains topical. While the participatory dimension can be banalized or seen as "supporting" one-way communication aimed exclusively at the capture of consensus, on the other hand it can be consolidated by going beyond the web, thus developing the first virtual interactions, and only then belonging to the local communities, thus activating potentially virtuous dynamics. Starting from this position, the paper highlights (1) the importance of how the net is used, (2) how the transfer of online communication in local civic action can occur also with social networking, (3) how this can be evaluated, creating a prototype to quantify participation in social networks. The objective of this work is to identify opportunities and problems of participatory planning through new technologies offering possible solutions through a "discussed" use of ICT and the drafting of guidelines to enhance the sharing of knowledge between the different actors in the planning process.

## 2 INTRODUCTION

In today's society, civic participation in its various forms, has become not only more sought after in regulations, but increasingly necessary in order to find the promised certainties in the resolution of common problems (D'Ambrosi, 2011). In literature such resolutions are synthesised in two main ways: either they are conflictual or collaborative. In the first case, the community provides the impetus for the involvement in public decision making with the decision makers. These decision makers may be more or less receptive in carrying out their role, but in general the participative dynamic goes from the outside to the inside: the policy makers must demand a role in the decision making process (Arnstein 1969; Friedmann 1987; Reardon 1998; Beard 2003). Another aspect of this same model describes experts who, within the government, act on behalf of the citizens. Among the most important are the advocacy planners (Davidoff 1965), the equity planners (Altschuler 1965; Krumholz et al. 1990; Krumholz et al. 1994), and also the progressive planners (Clavel 2010, Angotti 2011). They use their professional expertise to deal with the problems of marginalized groups.

The second case, which since the 90s has been pushed more and more, sees the relationship between policy makers, citizens and public opinion as a process with great collaborative potential to develop. Within this process, on the one hand there is strong individuality, but on the other hand cooperation becomes fundamental both to sharing the responsibility and to trying out new ways of planning more suited to globalisation.

These reflections allow consideration of the concept of planning and participation, which, while maintaining the social and civic characteristics have led to a broader meaning: today we talk about interactive planning thanks to collaborative governance which allows for the creation and implementation of inclusive policies on an urban or regional scale (Innes 1995; Healey 1997; Forester 1999; Abers 2000; Fung, Wright 2003, Innes et al. 2003; Delli Carpini, Cook, Jacobs 2004, Crosby et al. 2005; O'Leary et al. 2009; Feldman, Khademian 2007; Briggs 2008).

On the one hand the concept of "interactive planning" is evocative of a flow of information which increases the knowledge of the various equal users spread across the web's "Magnum sea", on the other hand, its combination with ICT results in the invention of political strategies based on reticular rather than homogenous logic. Recent researchers have underlined collaboration inside the network which includes both public and private actors (Kettl 2002; Booher et al. 2002; Hajer et al. 2003, Goldsmith et al. 2004; Agranoff 2007; Sandfort et al. 2008).

The drive towards paradigms imprinted on new cultural models has tried to construct a path that would integrate the classic path with the new theoretical models not only in local contexts.

However, if today there is consensus in recognising the importance of participatory processes, often there is obvious discontent in the absence of agreement or the adamant position taken on the issues in question or even in the degree of effectiveness perceived or measured in the inclusive process.

Based on these considerations, the collective process in which the content and forms of democracy are reconsidered is evident, giving particular significance to community participation. It is a process that today affects not only scholars and the institutional forms of government, but also groups, movements that express themselves in unconventional forms, thanks to web 2.0. However, the literature agrees that participatory processes must be structured and permanent (continuous not occasional); hence the need to construct contexts where the comparison of points of view might be the same for all matters of collective interest. The network can do much in this direction. In fact, it allows interaction which, in various forms – for instance: Participatory Planning GIS (Garau, 2012); 3D models (Hudson-Smith, 2005); platforms and computer games; integrated portals with augmented reality, etc. (Hanzl, 2007) – also lets young people propose and share ideas, but also atypical forms of association.

### **3 THE IMPORTANCE OF THE NETWORK IN URBAN PARTICIPATORY PLANNING**

The web is an interface for information about and the promotion of planning in progress. This is often a necessary tool for the sharing of experiences, coordination and organisation of activities and events. There is a vast amount of literature about citizen participation through the internet. Weber believes, for example that the inclusive actions on the web exert positive influences on participation policies, independent of the civic participation (Weber et al., 2003). Conroy and Gordon found that technological approaches in public meetings increased the level of satisfaction compared to traditional public meetings (Conroy et al. 2004). But there are also those who argue the opposite: it becomes a problem accepting the validity of the interface technology which the citizen might not know how to manage. To this point the citizen may feel manipulated (Innes 2005).

Today, an active participatory environment that uses internet has great potential to engage the public. Just consider how the latest generation technology allows you to raise the public debate even to young people through new participatory forms and practices. This occurs, for example, with virtual communities and social networks which, more and more, interact asynchronously with each other, creating a multitude of interactive environments in which people socialise (Facebook, Twitter), share content (Flickr, YouTube, Stumbleupon, Digg, blogs) and skills (Wikipedia, LinkedIn).

The use of these tools allows integrated forms of communication, encouraging the expressive dynamics of mobilisation; individual and collective spheres converge transforming the lack of transparency of individual relationships, making them transparent, potentially able to activate civic actions in different public areas (Boccia Artieri, 2011).

Furthermore, it is important to note that also on the web, the instruments used in an inclusive process depend largely on the level of participation that wants to be attained. The International Association for Public Participation (IAP2), relying on the scale of participation proposed by Arnstein (1969), has articulated five levels of public participation (inform, consult, involve, collaborate, empower) each successive level allows a greater impact on the overall process. Low levels of participation (inform, consult) involve the use of information tools such as interactive websites, public meetings or focus groups. Higher levels of participation (involve, collaborate, empower) allow feedback and the consequent practical implementation of community projects, through tools which go beyond a mere expression of willingness by those involved.

In order to understand which participatory process might be more suitable, Schlossberg and Shuford, suggested a matrix with various types of "users" along one axis and various levels of "participation" along the other. According to the authors, the understanding of the place in which the participation occurs is essential for its greater credibility and effectiveness. In their model, for example, the web pages are only sufficient to inform and consult the netizens. Consequently, the choice of tools to facilitate effective participation should be dictated also by the constraints of the web and by the characteristics of the actors involved in the participatory process (Schlossberg et al. 2003).

The new online communications and in particular social networks allow three main actions that enable participation: educational or informative action; relational action and finally organised action.

It starts from an initial approach in which the actors involved use the virtual spaces to create and disseminate information about the phenomena in question (the interaction in this phase is conversational and the degree of participation is emphasised by, for example, the “likes” on facebook or on blogs and by the sharing of this information with other parties involved), and then use the technology as an active part in the creation of connections between many individuals, developing a sense of gathering and community (the interaction in this phase is marked by the individual will to express their opinions, inputting skills, experience and personal opinions). It can also arrive at a level in which the virtual space can influence forms of participation for collective mobilisation (the interaction in this phase reaches the most advanced levels and is designed to eliminate digital borders, i.e. the dynamics constructed on the web become real, through heterogenous participatory actions which can be carried out in practice because they are put into the daily life of the city).

#### **4 E-PARTICIPATION AS A SOCIAL ACTIVATOR IN LOCAL CIVIC ACTION**

Virtual-real interaction is so powerful, above all for young people, that some researchers have underlined how for example social networks have assumed a relational role that has a direct impact on their lives (Leys 2011, Valtat 2011).

However these relational forms have major problems: many virtual movements, drivers of local civic action, do not have any continuity. In fact, more often than not they reach a "relational" peak which coincides with certain events of public interest and only last as long as is required for that activity. Online exchanges between contacts and updates end as soon as the event or action is no longer a priority for public discussion.

Therefore, if on the one hand the online tools help to organise civic action in a decentralised way, on the other hand, they are not able to guarantee stability and continuity, if not near specific emerging events (Kavada 2010, p. 117). The power of the web appears evident and it would be desirable to be able to exploit the initial enthusiasm in order to succeed in creating live and permanent relational processes (continuous not occasional) taking care to maintain the communicative architecture of the web, assuming common long-term projects.

One way to do this, could be a "quantitative and qualitative assessment" of the results which measure the contribution citizens want to give to ensure that decision-makers work better. It is possible, for example, to create indicators to monitor the cultural, social, intellectual and political growth of the participants during and after participatory processes. This could be published from time to time online, monitoring and updating the data, creating a greater sense of civic belonging to those who are part of that movement.

In this way, estimates could be produced of the perception that the drivers of the group "support" not only their interests but also the online community's. The increased desire in wanting to participate in decision-making could be analysed because it gives confidence and credibility to the participatory process.

Public awareness on the issues and policies in the long term can allow an effective assessment of the results of the initiative. In fact, the effectiveness of a participatory process is associated with the coherence of objectives and instruments adopted. Often this fails because it is given at an early stage when expectations are not consistent with the objectives or the time set (Laino 2012).

In the whirl of discussions regarding this debate it is fundamental to focus on the original objectives and resulting criteria that have led to inclusive planning practice (these criteria can include, for example: data and information circulating, respecting the schedule and working to short, medium and long-term deadlines, effects and assessments of the participatory process, etc.). However, over the course of time it is not easy to keep up the commitment to building cooperation and adapting such practices into society.

#### **5 THE CONSTRUCTION OF A MATRIX TO MONITOR THE DEGREE OF PARTICIPATION**

When thinking about the preparation of a methodology to monitor the users' degree of participation, it has been suggested that an interpretation matrix is set up which, on the basis of indicators related to the concept of participation in social networks, allows the evaluation of forms, activation and effects. The analysis is inspired by the ladder of citizen participation introduced by Arnstein (1969), then developed by Schlossberg et al. (2003) and by Bailey et al. (2011) to then put it into the world of social networks.

Once the blogs, forums and generic pages have been chosen to monitor, it is necessary to evaluate two important criteria in the first phase: the level of interaction (ranging from simple dissemination of information to the interaction itself) and the level of interest (which goes from involvement to the autonomous participation of other users), both structured by the same parameters but following different logic. In particular for the first (interaction):

- activities – how often they are updated;
- intensity – intensity of the conversations, tone of voice, etc.;
- credibility – level of dissemination among "influencers" in the various reference areas
- impact – willingness to change an idea, propensities etc., in relation to the objectives set

For the second (interest):

- activities – number of comments (total and average) in each post; number of daily comments etc..
- intensity – speed of dissemination: once a new post is written, the time it takes for the other users to read it is evaluated;
- credibility – level of confidence in the drivers of the movement
- impact – conversations, actions, directly measurable, in relation to the objectives.

In this way for each blog or forum selected, a first approximation can be made with a methodological grid to assess the current situation of the level of influence (1 = low, 2 = medium, 3 = high) based on the interaction and interest taken (Table 1 and Table 2).

Example A	LEVEL OF INTERACTION		LEVEL OF INTEREST	
	Information	Interaction	Involvement	Autonomy
ACTIVITY		3		2
INTENSITY		3	2	
CREDIBILITY		3		3
IMPACT		3		1

Table 1. Example of evaluation of degree of participation in a generic blog in social networks

Example B	LEVEL OF INTERACTION		LEVEL OF INTEREST	
	Information	Interaction	Involvement	Autonomy
ACTIVITY		2	3	
INTENSITY	3		2	
CREDIBILITY	2		2	
IMPACT		1	1	

Table 2. Example of evaluation of the degree of participation in a generic blog in social networks

In order to allow comparison between more movements, the average of the sub-parameters is taken (activity – intensity – credibility – impact) so that there is a single numerical value for the level of interaction and interest. This numeric parameter will measure the degree of participation (Figure 1).

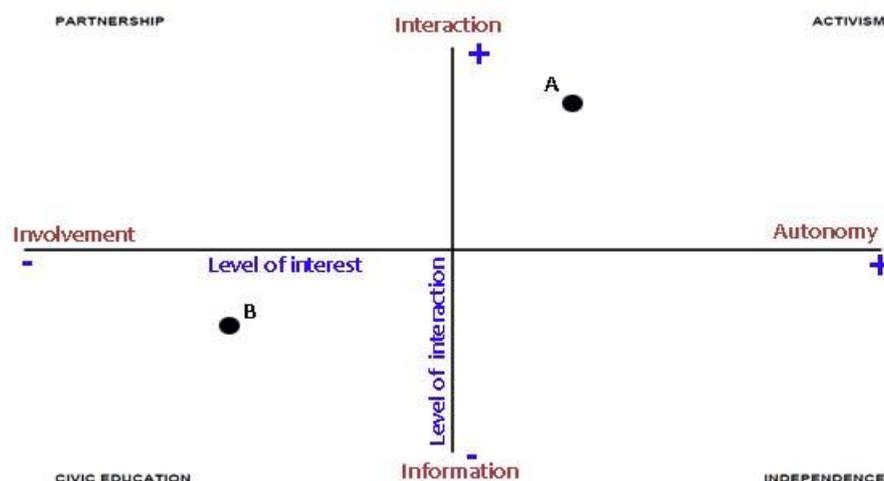


Fig. 1. Comparison of level of participation of generic blogs in social networks

The two axes (formed by the level of interaction and interest respectively) identify four areas where, in each one the participatory valence changes: the first is the so called civic education, equipped with a low level of interaction (one way communication) and a low level of interest among participants. The second, partnership connects a low level of interest with a significant level of participant interaction. In the third area, activism combines a high level of interaction with a high level of participant interest in terms of autonomy of the other users interacting in the blog. The last area, independence, links a high level of interest with a low level of interaction.

It has been noted that the success or failure of a blog depends on a set of merits, causes and indiscretions in which roles, competences, duties and responsibilities are monitored continuously. With this in mind, this tool is anticipated as a prototype to help measure participation in online environments which are difficult to quantify.

## 6 CONCLUSION

Public participation has been a constant of the planning process, especially since the nineties. Every generation has made its unique contribution in an attempt to bring improvements to interactivity between citizens, government and policy makers. And while it would seem that planning might not have an apparent need for the support of the social media, in some way, it has to seize its great potential. On this subject Christ (2005) was a pioneer, anticipating the concept that the social media would have led to a rethinking in the way to deal with the communicative and relational approach with the people involved.

Today one cannot underestimate the fact that on the one hand there is great technological progress which improves the quality of life of the individual, but on the other hand the model of development inevitably produces a social polarization in which users at different levels with the city “have to adapt in a constant and flexible way” (Castells et al. 2002, p. 82). This strong compromise of the city with the digital technology is evident in relation to globalisation (Sassen 2003); cities are in fact the result of a process of the redefinition of their structure, in which two complementary tendencies play a key role: on the one hand there is the push towards decentralization and territorial dispersion by the new information and communication technology (Barbieri 2010); on the other hand there is the tendency towards “global cities” acting as nodes in a network. It is important not to exasperate the research in seeking to engage the user in an almost surreal way, until it gets to a point in which it wants to make as real as possible what, in fact, is not real.

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