Institutional and technological determinants of civil e-Participation: Solo or duet?

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ABSTRACT

Do current advances in ICT actually encourage civil e-Participation and foster new governance? This research questions an enduring controversy among scholars on the crucial factors that promote active civil participation through ICT and pursues the attributes and implications of recent high civil e-Participation in many countries. By using data gathered from 125 countries worldwide, the technological and institutional conditions under which active civil e-Participation induces are analyzed. This research verifies that the level of political institutionalization and the degree of technological development interact to affect the level of participation through ICT, and that the magnitude of this effect is different for countries with different types of online populations and different forms of political institutionalization. This implies that e-Participation has a higher probability of increase when institutions and technology act in conjunction; efforts to realize e-democracy through ICT will fail if only a technological infrastructure is considered in countries. In other words, high e-Participation could be a menace for democracy in the long run in conditions where the ICT level is high yet lacking political institutionalization.

1. Introduction

Within the academic community, many scholars have raised the question as to whether current advances in the field actually encourage civil participation and foster new governance as is commonly claimed. Many researchers have suggested that the widespread diffusion of information and communication technology (ICT) as a new communications channel is associated with higher levels of political engagement and dramatic changes in politics (Castells, 2008; Sylvester & McGlynn, 2010; Quintelier & Vissers, 2008; Tolbert & McNeal, 2003; Hooghe, Marien, & Quintelier, 2010; Bennett, Maton, & Kervin, 2008; Boulianne, 2009; Sæbø, Rose, & Skiftenes Flak, 2008; Nam, Pardo, & Burke, 2012). A new government–citizen relationship can be manifested by emphasizing the efficiency of function-oriented technologies, and further, e-governance could be an alternative to representative democracy and hierarchical governance (6 Perri, 2004; Chadwick, 2003). Such discussions on the possibility of new governance began as developments in ICT were beginning to exert direct effects on the policy-making process, extending its participatory opportunities to average citizens. Citizens enjoy access to a significant amount of information that is readily available at a cheap price through the Internet. Armed with the latest technology such as the Internet and cellular phones, smart citizens are quickly placing themselves as participants

and providers in the political and administrative process (Weber, Loumakis, & Bergman, 2003; Davis, Elin, & Reeher, 2002).

Although we acknowledge the potential for consensus building and information exchange through ICT are associated with the level of Internet access and the spread of digital devices, the mechanism is neither automatic nor natural for encouraging active civil participation (Moon, 2002; Quintelier & Vissers, 2008; Boulianne, 2009). Studies clearly show that online participation is not inherent in ICT itself and each country has selected a different path for its e-Participation utilizing newly developed technology (Rodan, 2003; Chadwick, 2001; Tolbert & McNeal, 2003; Åström, Karlsson, Linde, & Pirannejad, 2012; Cullen & Sommer, 2011). For example, using data from the 2011 survey in Spain, Vicente and Novo (2014) explore two types of e-Participation of individuals' political and social participation on the Internet. Recent findings argue that opportunities for participation thorough ICT are dependent on the context and ways in which politics and administration are conducted in different countries. Literature emphasizes that each nation's unique political institution is closely related to the level of civil participation of its constituents (Zhenga, Schachterb, & Hozler, 2014; Norris, 2011; Coleman & Shane, 2011; Lijphart, 1994; Blais & Dobrzynska, 1998).

However, little research exists to answer how the use of ICT and/or institutions could influence distinctive outcomes on e-Participation across countries (Lin, Fofanah, & Liang, 2011; Rodan, 2003; Mundy & Musa, 2010). One can note that most of the studies on e-Participation have offered case-specific and incidental rather than general and

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systematic analysis. If e-Participation is related to the specific socio-economic underpinnings and/or institutional structure of countries, then what are the specific factors and mechanism of producing different levels of e-Participation across countries?

The objective of this research is to analyze factors affecting the potential for developing online participation and the causality between these factors. This study also intends to analyze how the interaction between the political institution and technology influences e-Participation. By using data gathered from 125 countries worldwide, the technological and institutional conditions under which active civil e-Participation induces are analyzed. This research investigates that the level of political institutionalization and the degree of technological development interact to affect the level of participation through ICT, and that the magnitude of this effect is different for countries with different types of online populations and different forms of political institutionalization. The significance of these analyses is that they delineate the technological and institutional variables that affect e-Participation and provide a quantitative relationship of mutual interactions between technology and institutions. Through such analysis, we would draw the relationship between civil e-Participation and political institutions in the countries.

In the following sections, we first review the existing literature on institutional and technical variables of civil participation for our research. We then present the methodology and models used for quantitative analysis of these variables, and examine any causality between variables on e-Participation. We analyze the ways in which institutions and technological factors shape the degree of e-Participation and examine the effect of interactions between technology and institutions on e-Participation. In conclusion, we discuss the implications and significance of our study for e-Participation for the necessity of political institutionalization for the government.

2. Increasing e-Participation: institution or technology?

Online civil participation is one way of responding to the needs of citizens in a way that is not possible with the current political system (Chadwick, 2006; Shirky, 2008; Painter & Wardle, 2001). A new political process that arises from harmonious coordination and consultation resulting in a balanced network of political entities using ICT is expected to solve the problems inherent in a representative democracy (Jho, 2005). In the 2007 US Presidential campaign, candidate Barack Obama employed social networking services (SNS) as a tool to disseminate political information, raise funds, unite the political supporters, and collect policy opinion (Delany, 2009: 9–10; Milner, 2010). Citizens develop unconventional ways of political participation through resistance, aggregation of interests, as well as taking part in public opinion surveys, in addition to the conventional political practices such as traditional voting, protests, and NGO activity (Ester & Vinken, 2003; Hacker & van Dijk, 2000). Such diversification of the participation techniques gives birth to the rise of the active political participation of citizens.

Current empirical research on e-Participation involves two categories of debates: the mobilization thesis vs. the reinforcement thesis. The role of ICT on participation is controversial because ICT reinforces the existing pattern of political participation or mobilizes new participation from citizens who are indifferent about political issues. On the one hand, many criticize the view that ICT has strong potential for increasing participation by citizens (Bimber, 2008; Salter, 2004; Lunat, 2008). In the US, the Internet has had a slight impact on revising the existing pattern of face-to-face civil participation (Putnam, 2000). On the other hand, ICT seems to attract new participation by citizens who are not represented in a current political system (Jho, 2009; Coleman, Lieber, Mendelson, & Kurpius, 2008). Fraser and Dutta (2008) claim that social network services expand the scope of political participation and establish both cooperative and interactive network shifting from an elite democracy to a participatory democracy.

2.1. Technology and e-Participation

Studies clearly have shown that there is a connection between the development of ICT and e-Participation (Clift, 2004; Freschi, Medaglia, & Nørbjerg, 2009). ICT provides necessary information for elections and voting; the 'Minnesota E-democracy Project' and 'Voter-Smart Project' had increased offline civil participation in local elections of the USA (Barber, 1998a; Barber, 1998b). Elberse, Hale, and Dutton (2000) confirm in the case of D-net in the US that a certain amount of causality exists between building ICT infrastructure and civil participation. The Internet platform continuously changes and evolves to meet the client's needs, while the varying types of media generate different manners in agenda setting and political participation (Balnaves, Mayrhoter, & Shoesmith, 2004; Lawson-Borders & Kirk, 2005). Twitter, as personalized as it can be, shapes relationships and spreads issues under its unique structure defined as "follow," verifying that the very traits including the style and structure of media can influence the thinking process and the behavior of its users. By providing the information needed to understand political and electoral issues, ICT can encourage civil participation (Boulianne, 2009; Morris, 2000).

High technological infrastructure in a country thus helps to increase the level of e-Participation. In a country of high technology, civil participation through cyberspace will be implemented without substantial friction, thus promoting participation. In contrast, if a country shows low technology, there could be higher boundaries between citizens to participate in public issues. Given that technology removes barriers between citizens and increases inter-organizational transactions, we propose the following:

Hypothesis 1. High technology in a country will be positively related to the level of e-Participation.

2.2. Institutions and e-Participation

While acknowledging the extent of technological permeation in a country influences the pace, spread, and impact of e-Participation, the use of ICT alone does not automatically foster civil participation nor does it grant good governance (Bertot, Jaeger, & Grimes, 2010; Boulianne, 2009; Åström et al., 2012; Arterton, 1987). According to Boulianne, as articulated in her meta-analysis, there exists no linear relationship between the use of the Internet and the offline civil/political participation (Boulianne, 2009). Citizens have a tendency to access only the information that they want and, as a consequence, the phenomenon of political initiatives being formed only by small offline groups has not changed significantly (Hill & Hughes, 1998). A study on interest groups of the US showed that netizens have a tendency to focus on personal and non-political issues rather than political or public affairs. The Internet is unable to increase the engagement of citizens indifferent to politics, and has only limited success in increasing political participation overall (Putnam, 2000; Davis, 1999).

Despite its apparent benefits, the analysis on e-Participation also begins with the institutional context in which the ICT was initially implemented. Political institutions, such as forms of democracy or party systems, develop differently in each country and affect the democratic performance of political participation in different ways (Norris, 2011; Lijphart, 1994; Blais & Dobrzynska, 1998). Political institutions set up 'rules' for individual expression, information transmittal, and social choices (Plott, 1979: 156), and can either accelerate or slow down socio-political changes (Jackman & Miller, 1995). e-Participation has been developed in a variety of ways based upon different intuitions. Even with implementation of ICT, the ability to redefine roles and relationships in the work processes of large organizations, such as government ministries, seems to be limited, mainly due to the resistance of multi-layer authoritative bureaucracies and institutions (Fountain, 2001: 44–63). Opportunities for online participation have benefited