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# The Public Value of Sense of Community in eParticipation

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Abstract. Concerns over a decline in social capital have been noted resulting from reduced civic and political engagement; recently however, the impact of Web 2.0 has been proposed as a revolutionary force to redress this deficit enabling greater participation by citizens and reinvigorating civic society. eParticipation is an increasingly important area of study to evaluate the promise of social media technologies to engage citizens in the democratic decision making process. This paper responds to the challenge by introducing the public administration paradigm of Public Value to eParticipation research in order to conceptualize and evaluate key issues of value, power, democratic participation and the quality of the decision process. This study introduces Sense of Community (SOC) to the eParticipation research field and highlights the important mediating effects of (SOC) to critical Public Value outcomes. Through the Public Value lens, the quality of the decision making process is reflected in the legitimacy of the public policy mandate; for eParticipation this means looking for ways to improve the quality of the decision making process. The aim of this research is to create a new measure of SOC for eParticipation that is based on Public Value theory.

Keywords. Sense of Community, eParticipation, Public Value, IS Success Model,

# 1. Introduction

As computing becomes increasingly ubiquitous, and social media and smart phone usage increases exponentially, according to Sæbø the possibilities of Web 2.0 open up new channels for citizen participation [1], in particular two way communication that facilitates change in existing interaction patterns needs to be investigated [2]. A key role of eParticipation is to facilitate engagement using interactive tools [3], for example leading e-Government practitioners such as Noveck have developed online communities of participation and demonstrated the benefits [4]. Calls for research come from Policy Informatics Krishnamurthy [5] as the generation and dissemination of feelings of empathy among users of participatory platforms is a complex challenge requiring systematic research. Susha and Grönlund call for eParticipation research that examines citizens' personal attitudes and their self-perceptions [2]. In answer the Community Psychology term, Sense of Community (SOC) is introduced to eParticipation to help explain participants' attitudes and experiences to the generation of a sense of shared community to pursue shared goals. SOC is defined as "a feeling

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that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" McMillan and Chavis [6]:9). Nabatchi urges the (re)discovery of the public in public administration; leading to a greater understanding of publicness, and to rich interactions with the public aided by developments in theory and practice. These developments include the advancement of Public Value (PV) and participation as priority research areas, in so doing, processes and mechanisms must be identified that maximize the creation of an organized collective will capable of addressing and resolving public problems [7]. In response, PV theory is introduced to eParticipation, as it facilitates the evaluation of access to ICT which goes beyond access to technology and takes into account motivational access, material access, skills access, and usage access and context of technology adoption [8] and includes political inequalities [9]. Any progress made in the pursuit of creating an organized collective will or 'public' must endeavor to draw the best from both the eParticipation and Public Administration research areas to create a better quality of participation (s) that enables the creation of Public Value. The eParticipation process should both produce intrinsic value and instrumental outcomes of value to the offline political policy process [9, 10]; and facilitate both online and offline participation as appropriate [11] enabling a new digital democracy [12]. As the SOC construct has not been used until now in eParticipation, a literature review of SOC was conducted, drawing on writing from the domains of community psychology, social media, e-commerce and cyber-psychology. This informed the construct development of SOC in eParticipation, the model was constructed with regard to the specific requirements of eParticipation

The object of this research is to: elucidate the theory behind Sense of Community as a contribution to eParticipation research. Explore the expected benefits of SOC to the eParticipation process and develop constructs to represent SOC in eParticipation and to create a new measure of SOC for eParticipation that is based on Public Value theory.

#### 2. Public Value and eParticipation

eGovernment already has a rich tradition of research on Public Value e.g. Bannister and Connolly, Cordella and Bonina, Grimsley and Meehan, Seltsikas and O'Keefe etc. [13-16]. Public Value (PV) provides a framework that enables the examination of values, both tangible and instrumental including participation, engagement and trust [17, 18]. As stated by Nabatchi [7] the research areas of PV and participation are of strategic importance to the future of public administration research and to understanding citizen engagement, a key tenet of democracy. Until now PV has not been applied to eParticipation; yet it can facilitate the examination of equal access, regime values and the requirements of the diverse range of stakeholders. Because PV has been defined by Moore as a framework that helps us connect what we believe is valuable and requires public resources, with improved ways of understanding what our 'publics' value and how we connect to them Williams et al. [19]. Two key ways that the theory of PV can be of benefit to eParticipation is in the creation of a 'public' that can understand and act in its own interests, which is at the heart of the PV paradigm, enabling citizens to be arbiters of Public Value [20]. Also Moore's PV strategic triangle reflects the interdependence of a range of stakeholders in Public Value goals, authorizing environment and operational capacity [21]. These describe the interaction

between a society's public values, the strategic goals which provide the normative consensus about the rights, benefits and obligations of citizens to society, the state and one another. The authorizing environment which must be legitimate and politically sustainable to key stakeholders; and public sector decision makers who must be accountable upwardly and outwardly to these groups and engage them in an ongoing dialogue over organizational means and ends [19].

A recognized weakness of earlier PV research is the lack of attention given to entrenched power and political bias; that by enlisting the public as co-participants in the creation of PV there lies a risk of developing further a managerial mode of governance that falsely implies power to the citizen [9] without recognizing the conflict among contending interests [22]. The reinforcing public values of the public sphere and progressive opportunity; refer to open communication and deliberation that looks to the social conditions required to ensure that members of society have an equal ability to exploit their capabilities and objectives [23]. These are attempts to redress the balance in participation, along with the recognition of regime values which refer to the collective benefits of the normative foundation of the state and are seen as a source of legitimacy guiding public servants [24]. While accepting that governments must definie strategies to enhance partnership and empower citizens to create environmental conditions that stimulate citizen engagement [21]. PV has an important role to play in the analysis of eParticipation, as it incorporates important public administration concerns as highlighted above with the practical concern of situating eParticipation within the broader socio-political landscape.

### 3. eParticipation

According to Cordella and Bonina the term e-Government is generically used to define any adoption of ICT to facilitate the daily administration of government and/or the production and delivery of government services to citizens through ICT [13]. The evolution of eGovernment consists initially of dissemination of information, then two way communication and eServices, with eParticipation occurring at the highest level of Moon's maturity model [25]. eParticipation research inherits a rich tradition of theory from the areas of sociology, politics, psychology, management and economics. Recently the electronic part of eParticipation, ICT in the form of Web 2.0 and mobile applications have enabled participation activities to develop an ever increasing range of scenarios in what amounts to a revolutionary change [12]. The most influential definitions from both Public Administration and eParticipation literature include: Macintosh who describes eParticipation as the use of information and communication technologies to engage citizens, support the democratic decision making processes and strengthen representative democracy [26]. For public administrators Creighton suggests that public participation is the process by which public concerns, needs and values are incorporated into governmental and corporate decision making [27], the ultimate goal being better decisions that are supported by the public.

As it has matured eParticipation has moved beyond an exclusively top down government led process, instead recognizing the duality of eParticipation as the integration of government led and spontaneous citizen-led eParticipation [28, 29] and a recognition of the role of social media in eParticipation [1]. The focal point of eParticipation is the citizen but there are also a wide variety actors involved in eParticipation processes: including politicians, government institutions; voluntary organizations [30]; also expert administrators/technical experts selected by politicians and professional stakeholders, the paid representatives of organized interests and public officials [31]. For Bryson, the identification and mapping of these stakeholders is of crucial importance to the design of the public participation process [32]. Government led participation often aims to improve the acceptance and legitimacy of the political process whereas citizens, lobbyists and non-governmental organizations usually demand their own interests through political channels or through activism [30].

As a maturing area of study there is an increased need to examine the contextual factors affecting the eParticipation process [33]. Of value to eParticipation is the proficiency of sense of belonging a subset of SOC to affect intentions to get and share knowledge and it has also been found to mediate the relationships between social capital factors and a virtual community member's intentions to participate [34]. To improve eParticipation it is important to gain a greater understanding of the barriers that impede participation, which present a variety of challenges including: a lack of citizen trust in political institutions, behavioral patterns that inhibit participation and difficulties in defining the role of eParticipation in the creation of value [35]. The stage has been set for citizens to play their part in the political policy process, and yet overcoming barriers to participation, engaging people in these processes and encouraging them to contribute in a meaningful way continues to be a challenge. As the role of government changes to that of a convener and enabler [36], government agencies continue to provide the rules, platforms, and access, as citizens and communities take on more responsibility in exchange for a greater say [37].

### 4. Sense of Community (SOC)

An extensive literature review was carried out to ascertain a greater understanding of the theory behind Sense of Community, to examine how SOC is created and its relevance to eParticipation. In 1974, Seymour Sarason presented the concept of psychological sense of community as the overarching value by which community psychology should be defined [38]. McMillan and Chavis describe it as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" McMillan and Chavis [6]:9). In spite of the importance of SOC as demonstrated by extensive empirical studies [39-45], a consensus about the dimensions of SOC does not exist. The most influential measure of SOC is the 1986 McMillan and Chavis Index which built on the work of Doolittle and McDonald [46] and Glynn [47]. They describe the origins of each of the SOC dimensions and how the dimensions interrelate to produce SOC. SOC theory is well validated in numerous online and offline communities, including; virtual learning environments [48], e-commerce [34, 49, 50] and social media communities [44, 45]. Virtual communities extend a new horizon by which to think about human identity online as people often become more confident online and explore new personas [51], potentially giving citizens a greater opportunity to participate in civic and political processes.

SOC is proposed as a mediating factor to successful eParticipation; as community building is a key role of citizen participation that includes the coming together and forming of online communities of eParticipation and the empowerment of such communities Tambouris et al. [31]. SOC can provide many levels of value to eParticipation including: SOC has been found to act independently of individual level

traits of gender income etc., and is a strong and positive predictor of internal and external efficacy and personal and political trust [52]; it has been found to positively affect organizational citizenship behavior; loyalty, civic virtue, altruism, and courtesy, in work communities [53] and in fostering both civic and political participation in offline communities [54, 55]. In a virtual community, sense of belonging refers to the feeling of belonging, membership, or identification to the virtual community; the feeling of members that they are integral parts of the virtual community, Zhao equates this to a SOC [34]. Trust has the strongest influence on a sense of belonging to a virtual community [56], reflecting the differences between electronic and face-to-face communication and the importance of identity online.

Without face-to-face contact, members of a community must feel trust to participate in the community. SOC represents a key variable in the development of online trust, as it enables members to develop their own identity and exchange support with other members, and influences members sense of belonging to the community [40, 50, 52, 56, 57]. According to Preece the impact of trust on participation comes from a history of positive past interactions that lead participants to expect further favorable interactions [58]. SOC is also a strong predictor of information sharing and even more importantly self-disclosure which is critical for maintaining and building relationships [59]. Interestingly for eParticipation; it has been found that when community members experience a SOC it reduces the negative impact of information overload on stickiness, community members may spend more cognitive effort dealing with relevant information, thereby increasing their information processing abilities [60, 61], this could result in greater citizen engagement.

It is recognized that the unique relationship of extensive benefits and obligations between the citizen and government [62] distinguish the research area of virtual communities of eParticipation. As such, the constructs of SOC in eParticipation require careful development to include the system functionality and the users experience of using the system Petter et al.[63]. With the PV framework, which is particularly useful when assessing the appropriateness of eParticipation constructs as it enables the review of public administration concerns within the broader sociopolitical landscape of eParticipation.

#### 4.1. Membership /Sense of belonging

The first construct of McMillian and Chavis [6] SOC Index is Membership which creates a sense of belonging and identification and involves the feeling, belief, and expectation that one fits in the group and has a place there. To build a feeling of SOC in eParticipation important questions of identification and belonging must first be addressed. Giddens has argued that with modernity, people's sense of belonging becomes reflexive, he proposes that autobiography in its broadest sense is at the core of self-identity in modern social life [64]. In a similar vein, Castells network society is characterized by belonging moving from the civil society of nations to identity becoming the main and possibly only source of meaning where people organize their meaning not around what they do, but on the basis of what they are, or believe they are [65]. In a later paper McMillan [66] extended SOC measures by emphasizing sense of belonging over boundaries, reflecting this the construct sense of community is chosen for this research model (Figure 1). To assess the functional and user experience of the new eParticipation construct sense of belonging constructs from E-S-QUAL [67] Fulfilment which measures the extent to which the platform fulfils the needs of the

community and Privacy measures the degree to which the platform provides a safe environment for participation. As SERVQUAL ignores the influence and quality impact of participation and support between users [68]. The construct Responsiveness [68-70] will be used to measure peer supportiveness.

# 4.2. Influence

The second construct of SOC is Influence a bidirectional concept; an individual must feel they have some control and influence over the community, whereas, conversely, for a group to be cohesive, the community must also influence its individual members [39, 53, 66]. Regarding eParticipation, Grönlund identified both the impact of different governance structures on the transaction zones of formal politics, administration and civil society and the *influence* of different partially conflicting forces or actors [71]. This research argues that Influence is an important aspect of eParticipation and that feedback both from the organizing agency and other participants plays a key role in promoting participation, mediating the power relations between the stakeholders; and affirming political efficacy and trust. Along with the McMillan and Chavis Index construct Influence, constructs from E-S-QUAL [67] Fulfilment referring to the extent to which the platform fulfils the needs of the community and the construct Responsiveness [68-70] to measure agency feedback and peer supportiveness will be used to assess the functional and user experience of the new eParticipation construct Influence.

# 4.3. Integration and fulfillment of needs /fulfillment and shared goals

The third component of SOC is integration and fulfillment of needs. Meaning reinforcement, a known motivator of behavior. To create a positive sense of togetherness, the individual-group association must be rewarding for its members. The extent to which individual values are shared among community members, will determine the ability of a community to organize and prioritize its need-fulfillment activities [6]. It is proposed that for the eParticipation process the ability of participants to prioritize values, create common goals and receive feedback from the organizing agency is of primary importance. As the shared common purpose unites the community (although people may well disagree with the details) creating a feeling of Integration and Fulfilment of needs. SOC theory helps us to understand why the agency organizing the participation process must ensure that the views expressed by the participants have been handled fairly, Christensen et al. found that, regarding process legitimacy participants may be willing to accept not achieving the desired outcome, as long as they perceive the process to be fair [72]. Using SOC theory, unfairness could equate to the sense of shared values being broken. Along with the construct Influence from McMillan and Chavis Index, constructs from E-S-QUAL [67] Efficiency will be used to measure whether the platform is simple to use and structured correctly and Fulfilment to measure the extent to which the platform fulfils the needs of the community will be used to assess the functional and user experience of the new eParticipation construct Fulfillment and shared goals.

The fourth part of McMillian and Chavis SOC Index is shared emotional connection this partly concerns a shared history. But importantly for eParticipation it is not necessary that group members have participated in the history in order to share it, but they must *identify* with it [6]. Wellman and Gulia [73] have argued that the public exchange of support may increase members' perceptions of being a supportive group when in fact, few people are actually involved in the supportive exchange. Lurkers are often not seen as valuable to the community [74], yet reading content produced by others can be seen as an essential form of participation [34] that can support the development of a SOC, although to create value the input of lurkers should be made visible through ratings and voting tools [75]. Giving and receiving support contributes to a sense of belonging and creates feelings of attachment and obligation [39]. As observing the behavior of others is an important behavior in virtual communities and it is important to recognize citizens' direct and indirect participation to value both readers and posters, in this way it is important for the platform to accommodate many different levels of user [76]. From the McMillan and Chavis Index Shared emotional connection measure will be used along with constructs from E-S-QUAL [67] Fulfilment measures the extent to which the platform fulfils the needs of the community and the construct Responsiveness [68-70] will be used to measure peer supportiveness to assess the functional and user experience of the new eParticipation construct Identified participation.

# 5. Measuring Public Value outcomes in eParticipation

With the aim of improving the quality of eParticipation and encouraging greater engagement, this research asks what are the Public Value components in eParticipation and how can a SOC be created in eParticipation? The main contribution of this research is to create a new measure of SOC for eParticipation that is based on PV theory. The PV paradigm as defined by Moore enables the conceptualization of a broad measure of eParticipation success from the citizen's perspective [21]. The significance of PV to eParticipation is that the framework facilitates the analysis of competing public administration concerns of efficiency, effectiveness and social values. With the creation of a public that can understand and act on its own interests [77]. This research builds on the PV eGovernment Net Benefits concept empirically validated by Scott et al. [78] they draw on the mirrored concepts of PV net value referring to the creation of PV as a function of both the value received and the cost of consumption and resources expended resulting in a net value, with the DeLone and McLean concept of Net Benefits in IS Success research [79]. Unlike later studies which used a narrow conception of Net benefits [80], the original construct conceptualized by DeLone and McLean [79] broadly refers to the extent that IS contributes to the success of individual, groups, organizations, industries and societies. The broad focus is very appropriate because of the diverse nature of the eParticipation process.

The draft constructs (Figure 1) proposed to measure Public Value/Net Benefits experienced by a user of an eParticipation platform were produced following a review of literature from interdisciplinary research areas of eParticipation, eGovernment, Public Administration and Political Studies and Community Psychology. Proposed Public Values include the highly complex construct Trust [81], in this research it is defined as an outcome variable resulting from the direct experience of the user [14, 76, 78]. Other values include Participation in decision making [78, 82]. Transparency, the assessment of government transparency as perceived by the user [78, 82]. Legitimacy involving the question of procedural legitimacy and the quality of the decision making [83], Political Efficacy, internal efficacy the beliefs about one's own ability to influence the political process, external efficacy the beliefs about the responsiveness of government officials to the concerns of citizens [52]. And the Effectiveness of the platform [78] all as perceived by the user.

#### 6. Research Framework



Figure 1 proposed model for the Public Value measurement of SOC in eParticipation with Net Benefits

The model in Figure 1 shows the new SOC in eParticipation constructs as outlined in section 4 and eParticipation Public Value/Net Benefits in section 5. Drawing on past research and using the DeLone and McLean IS success model, the expectation of causal interrelations between these constructs in line with the arrows indicated is drawn. The construct Member Satisfaction is drawn from the work on social media communities with SOC by Zhang [44], Satisfaction in virtual communities and Net Benefits Lin [84], Kim and Lee's Satisfaction with eParticipation applications [82] and Teo's Intention to Use on Government websites [76]. As this research introduces both SOC and PV to the eParticipation research domain, the conceptual model development process a rigorous methodology for developing constructs based on the Churchill [85] framework as advocated by Lewis [86] is being used to develop the SOC in eParticipation and PV in eParticipation Net Benefits constructs. The aim is to create a more relevant and precise tool for measurement that will enable the collection of data. Leading to the creation of a new measure of SOC for eParticipation that is based on Public Value theory.

#### 7. Conclusion

This paper introduces SOC and PV theory to eParticipation with the aim of creating a new measure of SOC for eParticipation based on the Public Administration paradigm, Public Value. This research proposes new SOC constructs for eParticipation and new PV/ Net Benefits using the PV framework to better situate eParticipation within the broader sociopolitical context and measure eParticipation success from the citizens'

perspective. The next step for this research will be an exploratory validation of the new measure.

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