Active E-participation in Local Governance:
Citizen Participation Values and Social Networks

Jooho Lee
(Assistant Professor, University of Nebraska at Omaha)

&

Soonhee Kim
(Professor, Syracuse University)

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Abstract

A growing body of literature has paid attention to electronic participation (e-participation) programs that utilize Web 2.0 technologies as a means of enabling citizens’ participation in local governance. Given that the essence of Web 2.0 applications is user-generated information, the success of e-participation may depend on citizens’ active e-participation. However, little is known about the driving forces of citizens’ active engagement in e-participation programs. What are the factors affecting e-participants’ active engagement in e-participation programs? To explore the research question, the study develops a model of active e-participation and tests it in the context of local governance. By building on and extending the existing literature on citizen participation, technology acceptance model (TAM) and social network, the study asserts that citizens’ perceptions of the intrinsic value of participation are associated with their active engagement in e-participation programs. Also, we argue that perceived instrumental value of citizen participation, which is equivalent to the perceived usefulness construct in TAM, is likely to influence citizens’ active engagement in e-participation programs. Furthermore, the study proposes that the strength of social networks affects citizens’ active engagement in e-participation programs. Using the 2009 E-Participation Survey data collected from Seoul Metropolitan Government, we found that e-participants are actively engaged in e-participation when they perceived a greater intrinsic value of e-participation. Meanwhile, perceived instrumental value and strength of social networks are found to have no significant effect. But, by analyzing male and female models separately, we found that male e-participants who perceived greater instrumental value of citizen participation are likely to engage in e-participation actively. Meanwhile, the findings indicate that women who perceived a greater intrinsic value of participation and are embedded in weaker offline social networks are likely to actively engage in e-participation.
INTRODUCTION

As the Obama Administration has launched Open Government Initiatives since early 2009, federal agencies and state governments have actively adopted web 2.0 applications to enable e-government to be more participatory, transparent and collaborative. Recently, government use of Web 2.0 technologies has expanded to include various forms of electronic participation (e-participation) applications such as online forums, virtual discussion rooms, electronic juries or electronic polls. Also, a growing body of literature focuses on e-participation as a means of enabling greater citizen participation in policy formation and evaluation and facilitating greater information exchange between citizens and government [1, 2]. Given that the essence of Web 2.0 applications is user-generated information, the success of e-participation applications using Web 2.0 technologies may depend on citizens’ active participation. The field of e-participation has progressed significantly; however, the literature has left significant gaps in our understanding of the factors affecting citizens’ active engagement in e-participation programs.

To fill some of these gaps, this study explores how citizens’ active engagement in e-participation programs is facilitated by their perceptions of intrinsic (e.g., educative, developmental, and informative experiences) and extrinsic values of e-participation (e.g., perceived influence on governmental decision making through the participation) and strength of social networks where citizens are embedded in an offline setting.

To examine several hypotheses, the study uses the 2009 E-Participation Survey data collected from 1,076 e-participants of an e-participation program called Cheon Man Sang Sang Oasis (hereafter Oasis) run by Seoul Metropolitan Government (SMG) in South Korea since 2006. The e-participation program Oasis applies Web 2.0 technologies as a platform for citizen participation. Oasis offers well-organized and systematic opportunities for citizens to submit
their ideas and suggestions on proposed specific SMG policies via online policy forums. Using the Oasis program, e-participants also propose new ideas that may contribute to enhancing government effectiveness and resolving community issues related to any public policy and programs in the SMG and governance issues in the city of Seoul.

**Theoretical Model and Hypotheses**

This research suggests a model of active engagement in e-participation programs. In this research, e-participation is defined as web-enabled applications (especially Web 2.0 technologies) designed for citizens to participate in public administration decision making process [3]. According to this operational definition, the nature of e-participation includes both citizen participation and technology use. Given that one aspect of e-participation involves citizen participation, this research reviews citizen participation literature in the field of public administration. The value of citizen participation has long been discussed among scholars in public administration [4, 5]. From the citizens’ perspective, this study focuses on two types of values created by citizen participation: intrinsic values and instrument values [4, 5]. The intrinsic value of citizen participation has been supported because it is essential means of promoting building and sustaining democratic systems. Advocates of the instrument value of participation have highlighted that citizen participation serves as a means of affecting and monitoring government bureaucracy, which enhances citizens’ control over administrative process and in turn, promotes a sense of ownership and empowerment [5, 6].

To better understand another aspect of e-participation, technology use, this research critically reviews a technology acceptance model (TAM). Based on a psychological literature [7], the essence of TAM is that individuals adopt IT applications when they perceived usefulness and ease of use of the IT applications [8, 9, 10]. Recently, TAM model has been widely applied
to understand users’ adoption of web-based application services such as online shopping [11, 12] and online tax filing [13, 14]. However, TAM has paid limited attention to the role of social structures in which individuals are embedded in the adoption of web-based application services using Web 2.0 technologies.

The third stream of studies reviewed for the development of study model is social network theory. Social network literature has considered social networks as resources in that people can access information, gain social support and receive recognition through their social networks [15, 16]. In particular, the strength of social networks has been debated among network scholars. Advocates of strong social networks argue that people embedded in strong social networks enjoy benefits in terms of accessing information, exchanging social support and receiving recognition easily and promptly [17, 18, 19]. However, it is costly to build and maintain strong social networks. Proponents of weak social networks emphasize that people embedded in weak social networks can be provided a better opportunity to access diverse groups of people and in turn, to gain nonredundant and new information, to enjoy autonomy, and to manage them with a lower cost [19, 20].

By building on and extending the existing literature on citizen participation, TAM, and social network, the study asserts that citizens’ perceptions of the intrinsic value of participation are associated with their active engagement in e-participation programs. Also, we argue that perceived instrumental value of citizen participation, which is equivalent to the perceived usefulness construct in TAM, is likely to influence citizens’ active engagement in e-participation programs. Furthermore, the study proposes that the strength of social networks affects citizens’ active engagement in e-participation programs.
Intrinsic value of participation and e-participation

In this study, the intrinsic value of citizen participation refers to citizens’ perception of developmental, educative, and informative effects of their participation in administrative decision making process [4, 5]. The underlying theory of the intrinsic value relies on intrinsic motivation in that motivation for active participation mainly stems from inside an individual rather than from any external rewards such as economic gains. In the context of the workplace, intrinsic motivation literature argues that an individual is motivated when he or she feels a sense of pleasure from a task or a sense of satisfaction in completing or even working on a task. Prior studies offer empirical evidence that intrinsic motivation plays a crucial role in the adoption of new IT applications [21, 22, 23].

Proponents of the intrinsic value of citizen participation have highlighted that through citizen participation, citizens are able to promote self-esteem and self-fulfillment [24, 25] and develop the attitudes and skills of citizenship, which requires public judgment [26]. Also, citizen participation provides an opportunity to be better informed of their community issues [25, 27, 28]. Through the experience of citizen participation, citizens gain a sense of belonging in their community, which facilitates their willingness to learn more about community issues [5, 25]. Moreover, citizen participation allows citizens to learn the art of deliberation and compromise and foster an active and public-spirited moral character and, in turn, realize their potential [4, 5].
We argue that citizens are motivated to actively engage in e-participation programs when they perceived greater intrinsic value created in the process of e-participation. For example, it is likely that e-participants may more actively engage in e-participation programs when they perceive e-participation experience helps them enhance their public knowledge and judgment on government policy and gain a greater sense of belonging in their community.

H1: E-participants who perceive greater intrinsic value of e-participation are more likely to actively engage in e-participation.

**Instrumental value of participation and e-participation**

This study also asserts that citizen’s active engagement in e-participation programs is extrinsically motivated. Extrinsic motivation theory emphasizes that individuals perform a behavior in order to achieve specific goals and to receive economic and political rewards in the context of workplace [29]. In TAM, the perceived usefulness construct has been used to capture the role of individuals’ extrinsic motivation in adopting new technology [21, 22, 30]. Empirical studies found the positive effect of perceived usefulness on technology adoption [8, 9, 11, 12, 13, 14].

Instrumental value of citizen participation refers to participants’ perceptions of influence on governmental decision making. The e-participants who perceive greater influence on public administration decisions and governance issues may actively engage in e-participation programs. In addition, as e-participation applications are based on Web 2.0 technologies, social rewards such as recognition are available to e-participants in that e-participants and government bureaucrats observe and interact one another by posting and replying their ideas or comments. It is likely that e-participants are aware of an opportunity to receive social rewards from peer e-
participants and government through engaging in e-participation. Thus, political and social rewards serve as incentives for e-participants to actively engage in e-participation programs.

H2: E-participants who perceive greater instrumental value of e-participation are more likely to actively engage in e-participation.

**Strength of social networks and e-participation**

Strength of social networks refers to the extent to which individuals intensively interact with others [17, 20]. How does the strength of social networks affect citizens’ engagement in e-participation programs? This study argues that e-participants embedded in strong offline social networks are likely to commit actively to e-participation. Strong offline social networks can serve as an incentive because active e-participation provides an opportunity to build weak online social networks as a complementary means for mobilizing resources. Due to the nature of online interaction (e.g. chat with anonymous friends, asynchronous interaction), people tend to be connected one another through weak social networks [31,32]. Thus, when e-participants embedded in stronger offline social networks actively engage in e-participation, they are likely to gain the complementary benefits from weak online social networks (e.g. no redundant and new information, autonomy, lower maintenance cost), which serves their interests by reinforcing their resources.

Furthermore, e-participants who already have strong social networks are likely to have greater ability to engage in e-participation. Citizens’ e-participation can be consider as less active if they simply search for information and observe the postings of others. The lack of active e-participation barely creates an opportunity for e-participants to build online social networks with other e-participants. But in order to build online social networks through e-participation program, e-participants must initiate interactions by being exposed to peer e-participants such as posting
their suggestions or replying to others’ postings in the e-participation program. It is likely that people embedded in strong offline social networks are equipped with knowledge about how to initiate, build and sustain social networks, which enhances their capability to get engaged in e-participation actively.

H3: E-participants embedded in strong offline social networks are more likely to actively engage in e-participation.

METHOD

Data Collection

To test research hypotheses, we used the 2009 e-participation data collected from a web-based survey targeting the citizen members of the Oasis program. The sample frame was 10,136 citizen members of Oasis who have posted at least one suggestion over the last three years. As of June 2009, 34,792 citizens have joined Oasis. Oasis has served as an electronic channel of citizen participation in decision making process of the SMG. Using Oasis, citizens view, submit and share their ideas and suggestions on SMG policies and programs associated with community and governance issues. The members of Oasis were encouraged to voluntarily participate in the survey. Of 10,136 members, 1,076 participants responded to the survey (response rate of 10.6 percent). Non-response bias test was performed to see if samples of population have an equal opportunity to respond to the survey [33]. The results show that the respondents and non-respondents were not significantly different in terms of age, gender or living location. Table 1 shows the demographics of study samples. It should be noted that female samples are underrepresented.
Table 1. Demographics of OASIS Survey

<table>
<thead>
<tr>
<th>Variables</th>
<th>Characteristics</th>
<th>Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>73.9</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>26.1</td>
</tr>
<tr>
<td>Age</td>
<td>20s</td>
<td>22.1</td>
</tr>
<tr>
<td></td>
<td>30s</td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>40s</td>
<td>27.8</td>
</tr>
<tr>
<td></td>
<td>50s</td>
<td>15.2</td>
</tr>
<tr>
<td></td>
<td>Over 60s</td>
<td>2.5</td>
</tr>
<tr>
<td>Education</td>
<td>High school diploma or equivalent</td>
<td>13.9</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree in progress</td>
<td>12.9</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree</td>
<td>56.4</td>
</tr>
<tr>
<td></td>
<td>Master’s degree in progress</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Master’s degree</td>
<td>13.6</td>
</tr>
<tr>
<td>Income (monthly)</td>
<td>Less than $1,667</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>$1,667 to $2,492</td>
<td>25.5</td>
</tr>
<tr>
<td></td>
<td>$2,500 to $3,332</td>
<td>23.4</td>
</tr>
<tr>
<td></td>
<td>$3,333 to $4,166</td>
<td>15.2</td>
</tr>
<tr>
<td></td>
<td>$4,167 to $4,999</td>
<td>9.3</td>
</tr>
<tr>
<td></td>
<td>More than $5,000</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Measures

Dependent variable

Active e-participation. For the test of the hypotheses, this research employed the number of suggestions posted on the Oasis program as a measure of e-participants’ active engagement in e-participation. The survey participants were asked to indicate the extent to which they posted their suggestions on Oasis using a 6-point Likert-type scale ranging from “Never” (1) to “More than 10 suggestions” (6).

Independent variables

*Perceived intrinsic value.* Considering the context of e-participation, we used four items to capture e-participants’ perception of the intrinsic value of e-participation. These four items were rated on 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). As
the four items showed high correlation (Cronbach Alpha=.84), the average scores of the items were used in the analysis.

*Perceived instrumental value.* Davis’s [10] perceived usefulness scale was modified to capture perceived instrumental value of citizen participation. Based on citizen participation literature, we considered the instrumental value of citizen participation as compatible with perceived usefulness construct in TAM. The participants were asked to indicate the extent to which they agreed with the four survey items using a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). High correlation among the items (Cronbach Alpha=.83) allows us to aggregate those items and to create a new composite variable. The average scores were used in the analysis.

*Strength of social networks.* To capture e-participants’ strength of social networks, this study used respondents’ self-reporting on the frequency of going out with people for socialization. Respondents were asked to indicate how often they go out with five different groups of people (family members, neighbors, friends, co-workers, and members of social groups) for socialization (e.g. having lunch). Five items were designed with a 7-point Likert-type scale ranging from “Every Day” (1) to “Once a Year” (7). Correlation among the items was slightly lower than threshold (Cronbach Alpha=.67). The average scores of the five items were used in the analysis.

**Control variables**

*Perceived ease of use.* As one of core construct of TAM, perceived ease of use was included as a control variable. To measure perceived ease of use, this study used the average scores of four survey items with 5-point Likert scale (Cronbach Alpha=.83).
Social altruism. To measure social altruism, we used a single item as to respondents’ volunteer experience [34]. The respondents were requested to indicate how often, on average, they have been involved in volunteer work for the past three years. This item was rated on a 7-point Likert scale ranging from “Never” (1) to “Every Day” (7).

Voting participation. To capture the degree of political participation, we measured voting participation. We used an index of dummy variables that include the 2008 Presidential Election, 2008 National General Election, 2006 Seoul City Mayor Election and 2006 Seoul Council Member Election. For the purpose of analysis, this research combined their responses to create a composite variable.

Trust in government. TAM-based studies offer empirical evidence on the relationship between trust in IT service provider and the adoption of IT services [35]. To control for the effect of trust in an IT service provider, this study used a measure of trust in the government who provides the e-participation programs. Trust in government is measured by a single item: Do you trust that SMG works in your best interests? The item was rated on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

E-participation experience. E-participation experience captures the ability of e-participants with regard to the use of Web 2.0 technologies. Also, it is likely to capture the extent to which e-participant’s prior use of e-participation program affects the degree of e-participation activities. This study includes the e-participation experience as a control variable in order to control the effect of the difference between experienced and inexperienced participants on the degree of e-participation activities [36]. The respondents were asked to indicate the length of membership in Oasis. This question was scaled from 4 years (1) to less than 1 year (4).
It is likely that respondents’ socio-economic status (e.g. gender and income) have effects on new technology adoption behavior such as active e-participation. To control for these effects, we included gender as a dummy variable, which was set to one if a respondent was male. Age was measured on a continuous scale. Note that age squared variable was created to examine that age has a curvilinear relationship with active e-participation. Education was measured on an interval scale set to 1,2,3,4 and 5 for respondents of High School Diploma, those of Bachelor’s Degree in Progress, those of Bachelor’s Degree, those of Master Degree in Progress and those of Master Degree, respectively. Likewise, income was measured by households’ monthly income, with an interval scale ranging from More than $5,000 (6) to Less than $1,667 (1).

RESULTS

In Table 2, descriptive statistics and the correlation matrix show that two types of citizen participation values are significantly correlated with active e-participation. However, strength of social networks is not significantly related to active e-participation.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Active E-Participation</td>
<td>3.12</td>
<td>1.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceived Intrinsic Value</td>
<td>3.39</td>
<td>0.71</td>
<td>.18*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Perceived Instrumental Value</td>
<td>3.28</td>
<td>0.74</td>
<td>.18*</td>
<td>.69*</td>
<td></td>
</tr>
<tr>
<td>4. Strength of Social Networks</td>
<td>3.64</td>
<td>0.89</td>
<td>.03</td>
<td>.18*</td>
<td>.15*</td>
</tr>
</tbody>
</table>

*p < .05

Table 3 shows the results of OLS regression analysis of two models. Model 1 is a baseline model with only control variables while Model 2 includes three independent variables.
plus control variables. When the effects of independent variables are omitted, e-participants’ perception that the Oasis technology is easy to use does not significantly affect their active postings on Oasis. The findings may imply that ease of use is indirectly associated with active e-participation [10, 37, 38]. The number of suggestions citizens posted on Oasis is likely to be increased when they have been involved frequently in volunteer activities, have greater trust in government, and have served as a member of the e-participation program for longer time. Also, the results show that male e-participants reported posting a greater number of suggestions than female e-participants. This finding is inconsistent with recent empirical studies on the role of gender in Web 2.0 technologies such as social media use [39, 40, 41]. Age shows an inverted U-shaped relationship with active use of participation. The effects of control variables depict similar patterns in Model 2.

Consistent with H1, Model 2 demonstrates a positive and significant association between perceived intrinsic value of e-participation and active e-participation, which confirms prior empirical studies on the effect of intrinsic motivation on new technology adoption [23]. However, H2 and H3 are not supported by the data.
Table 3. OLS Regression Results: Aggregated Model

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta (S.E)</td>
<td>Beta (S.E)</td>
</tr>
<tr>
<td>Perceived Intrinsic Value</td>
<td>.20** (.09)</td>
<td></td>
</tr>
<tr>
<td>Perceived Instrumental Value</td>
<td>.10 (.09)</td>
<td></td>
</tr>
<tr>
<td>Strength of Social Networks</td>
<td>-.07 (.05)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Ease of Use</td>
<td>.04 (.07)</td>
<td>-.07 (.08)</td>
</tr>
<tr>
<td>Social Altruism</td>
<td>.11*** (.03)</td>
<td>.12*** (.03)</td>
</tr>
<tr>
<td>Voting Participation</td>
<td>.02 (.04)</td>
<td>.03 (.04)</td>
</tr>
<tr>
<td>Trust in Government E-participation</td>
<td>.26 *** (.05)</td>
<td>.19*** (.06)</td>
</tr>
<tr>
<td>Experience</td>
<td>.16 *** (.04)</td>
<td>.17*** (.05)</td>
</tr>
<tr>
<td>Male</td>
<td>.23 ** (.11)</td>
<td>.28** (.11)</td>
</tr>
<tr>
<td>Age</td>
<td>.03 *** (.00)</td>
<td>.03** (.00)</td>
</tr>
<tr>
<td>Age²</td>
<td>-.00 *** (.00)</td>
<td>-.00*** (.00)</td>
</tr>
<tr>
<td>Education</td>
<td>.04 (.04)</td>
<td>.05 (.04)</td>
</tr>
<tr>
<td>Income</td>
<td>.01 (.03)</td>
<td>.02 (.03)</td>
</tr>
<tr>
<td>N</td>
<td>874</td>
<td>816</td>
</tr>
<tr>
<td>Adjusted R</td>
<td>0.14</td>
<td>0.15</td>
</tr>
<tr>
<td>F</td>
<td>14.93***</td>
<td>12.35***</td>
</tr>
</tbody>
</table>

Note: For two-tail tests; * p < .10; ** p < .05; *** p < .01

Since the test of study hypotheses count on the aggregated sample, we further analyze the data by disaggregating the sample into two groups: male and female samples. As discussed earlier, the rationale stems from the findings on the significant effect of gender on active e-participation and recent studies offering empirical evidence on the crucial role of gender in the use of Web 2.0 applications. Also, a Chow test was performed to examine the OLS model using male sample would be different from the model using female sample. The Chow test verified the difference (F=4.60, p < .001) between the two, and thus allowed us to test them separately using male and female data sets. Table 4 shows the results of a separate OLS analysis of Male and Female data sets.
The results demonstrate that only perceived instrumental value is significant in the analysis of male e-participants, while perceived intrinsic value and strength of social networks are significant in the analysis of female e-participants. As to the role of e-participation value in engaging in e-participation actively, the findings imply that male citizens’ active engagement in e-participation is triggered by their perceptions of greater instrumental value. The result indicates that male e-participants are more likely to put a greater number of postings in the e-participation program because they might perceive e-participation as a means of acquiring a sense of ownership, influence and empowerment. On the other hand, female citizens’ active engagement in e-participation is influenced by their perceptions of greater intrinsic value.
The finding is consistent with the empirical studies on the positive effect of extrinsic motivation on men’s behaviors, such as creativity and performance [42, 43, 44]. On the other hand, female e-participants are more likely to use the e-participation program actively because they might perceive e-participation as a channel for being informative, educated and developmental. The finding is also consistent with empirical studies offering evidence that women are often intrinsically motivated to perform tasks [44, 45, 46].

Furthermore, the results exhibit that there are gender differences in the effects of social networks on active e-participation. There is no significant relationship between the strength of social networks and active e-participation of male e-participants. However, the results show the negative and significant effects of the strength of social networks on female e-participants’ active e-participation. That is, women respondents reported that they are actively engaged in e-participation when they are embedded in weaker offline social networks. In an offline setting, underrepresented groups of people like women are often embedded in low-density networks or take peripheral (as opposed to central) positions [47], which correspond with weak social networks [48]. In weak social networks, women are likely to face structural constraints to express their interests, to access information, and to receive recognition [47, 49]. Specifically, women embedded in weaker offline social networks are limited to enjoying the benefits available in strong networks that affect to have a greater opportunity to express their interests, gain access to information and receive recognition in a timely manner. These constraints may serve as motivation factors for women to seek active e-participation as a supplementary tool for expressing their interests, gaining access to information, sharing information with others, and receiving recognition.
This study also found that male and female e-participants show different patterns in terms of the role of voting participation in active e-participation. Men’s voting participation is significantly related to greater number of postings in e-participation programs, while women’s voting is not. Active political participation can be considered greater interest in political rewards such as gaining control power and exercising influence on political institutions [44, 46]. Men with greater interest in political rewards are more likely to engage actively in administrative decision making processes through e-participation program because active e-participation may create another opportunity to reinforce political rewards. The results of the analysis of male e-participants only, trust in government, e-participation experience duration and age variables are found to have significant effects on male e-participants’ active e-participation. Meanwhile, for the analysis of female e-participants, it is only e-participation experience duration that significantly influences female e-participants’ active e-participation.

**IMPLICATIONS AND CONCLUSION**

While web-based e-participation programs have been championed as a crucial tool for e-government to facilitate citizen participation, there have been limited efforts of analyzing the process and effectiveness of e-participation from e-participants’ perspectives. Active e-participation in local governance could matter for effective and transparent decision-making and problem solving in local governance. The study proposed a model of active e-participation in the era of Web 2.0 and tested the model using the survey data collected from the residents of Seoul who have hands-on experience with the e-participation program run by SMG. The study results in the aggregated model demonstrate that citizens actively engage in e-participation when they are motivated by their perceived intrinsic value of citizen participation, rather than perceived instrumental value. However, the study results show different motivation
factors of active e-participant by gender. Perceived instrumental value of e-participation is positively associated with male e-participants’ active e-participation. Meanwhile, female e-participants’ perceptions of the intrinsic value of e-participation and their weak offline social networks are positively associated with active e-participation.

This exploratory study contributes to e-participation literature by uncovering several dimensions of motivation factors affecting citizens’ active e-participation. The study findings imply that local governments may need to pay more attention to how to design and evaluate e-participation programs to enhance the extrinsic value of e-participation to facilitate male e-participants’ active e-participation. Further attention should also be paid to how to structure and operate e-participation programs to improve their intrinsic value and provide opportunities for online social networks to meet the motivation factors of female e-participants’ active e-participation. Accordingly, local governments can apply a participatory approach for e-participation program development with inputs from diverse representatives of a local community. However, the results of this study could be outcomes of unique citizen engagement evolution that are affected by South Korea’s historical, political, and cultural contexts. Accordingly, more in-depth case studies in various regions and countries may help develop active e-participation models and facilitate theory building about citizen engagement and active e-participation in local governance.

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Authors’ e-mail address: Jooho Lee (jlee64@gmail.com) & Soonhee Kim (soonheekim@maxwell.syr.edu)
References


[38] Subramanian, G. A replication of perceived usefulness and perceived ease of use measurement, Decision Science, 25, 5-6 (1994), 863-872.


**APPENDIX**

**Survey Items used in the Study**

*Active e-participation* (1 item, 6-point Likert-type scale)
How many suggestions you have posted on Oasis for the past three years?

*Perceived intrinsic value of citizen participation* (4 items, 5-point Likert-type scale)
(1) My participation in Oasis has increased my self-esteem
(2) My participation in Oasis has contributed to community building
(3) My participation in Oasis has helped me build better civic duties
(4) My participation in Oasis has provided for an opportunity to learn more about community issues

*Perceived instrumental value of citizen participation* (4 items, 5 point Likert type scale)
(1) SMG actually uses my proposal(s) for making and implementing policies and programs
(2) My proposal is helpful for SMG to make and implement policies and programs even though they don’t use it actually
(3) SMG actually uses others’ proposal(s) for making and implementing policies and programs
(4) My participation in Oasis helps SMG make a useful decision making and policy implementation

*Strength of social networks* (5 items, 7-point Likert-type scale)
How often do you go out with the following groups of people for socialization (e.g. having lunch, watching movie)?
Family members
Neighbors
Friends
Co-workers
Members of social groups

*Perceived ease of use* (4 items, 5-point Likert scale)
To what extent do you agree with the following statements?
(1) Oasis is easy to search for content and proposals available on Oasis websites
(2) Oasis provides effective functions that deal with my questions (e.g. Help desk, Q&A, contact information)
(3) Oasis provides well-designed content structure
(4) Oasis provides the functions that are easy to submit ideas, get feedback, and reply

*Social altruism* (1 item, 7-point Likert scale)
How often, on average, have you involved in volunteer works for the past three years?

*Voting participation* (4 items)
Have you voted in prior elections as follows?
- 2008 Presidential Election  Yes  No
- 2008 National General Election  Yes  No
- 2006 Seoul City Mayor Election  Yes  No
- 2006 Seoul Council Member Election  Yes  No

*E-participation experience duration* (1 item, 4 point Likert-type scale)
How long have you had a membership of Oasis?