Abstract of Dissertation

論文の内容の要旨

Reshaping Participatory Planning through "Local SNS": Focusing on High-rise New Towns in Gyeonggi Province

地域 SNS を活用した参加型都市計画の再構築

-京畿道の高層 ニュータウン住宅地を事例として-

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Korea is recognized as one of the fastest growing countries in the world. However, highly compressed economic growth along with rapid urbanization since the 1960s led to severe housing shortage. In order to solve the housing problem, the Korean government had promoted a high-rise high-density apartment construction policy. As a result, while housing supply ratio increased from 71.2% in 1980 to 108.7% in 2007, short-term massive construction also caused undesirable side-effects such as poor infrastructure, lack of participation and uniform landscape. Meanwhile, since the late 1990s, participatory planning (Maeulmandeulgi) has become a new paradigm in Korea to overcome the limitations of modern urban planning. Nevertheless, as the ratio of apartments accounts for 60% of total residential housing, Maeulmandeulgi regarding apartments has seldom been conducted. In general, participation works best when the group is small and located in rural areas. However, conventional participatory planning methods in high-rise high-density urban areas revealed many limitations for its population density and mobility. Although face-to-face (FTF) communication is still important and can never be replaced 'Local SNS (地域 SNS)' has

recently emerged to supplement these limitations.

Participatory planning has become one of the most influential planning theories to overcome limitations of rational planning in these days. Public participation can create a sense of ownership over a plan and can reduce conflict over the long term, because those involved feel responsible for its policies. Notion of Participatory planning, Machizukuri, and Maeulmandeulgi are similar as a methodology in which the demands of local residents are reflected in the planning. In general, it works best when the group is small and located in rural areas. Conventional participatory planning in high-density urban areas revealed many limitations for its density and mobility. Although face-to-face (FTF) communication is still important and never be replaced, online-assisted urban planning has recently emerged to supplement these limitations.

As e-government concept has emerged recently as a new paradigm, much scholarly work in urban planning has been done on this topic. However, many of them examined possibilities of ICT in urban planning from one-time social experiments or experts' perspectives. Fewer studies have attempted to analyze real projects. Therefore earlier studies could not provide practical and actionable assist to the government and community leaders.

According to my survey in 2012, 7.39% of capital area population is members of Local SNSs. By analyzing empirical evidences, this research aims to (1) verify an impact of Local SNS in participatory planning in high density residential areas (2) understand characteristics of Local SNSs for participatory planning (3) offer design principles to build and manage the good Local SNSs for better participatory planning. This research consists of 3 parts

First, I reviewed the history of Local SNS in Korea from 1998, when the first Local SNS appeared, to today. I divided it into 5 periods based on their properties of service platforms, initiatives and providers. 87 newspaper articles, 12 journal papers and 7 government reports were used to verify characteristics of each type. I found out that illegal price-fixing movement, new-town designation issues and thirst for information about local area from massive newly moved population triggered recent Local SNS boom since 2006. Apart from reasons of creation, as housing bubble burst down, Local SNS start to consider an improvement of living environments. Civic participation, Maeulmandeulgi through Local SNS was naturally occurred. Though rise and death of Local SNS, I found that accessibility, search-ability affected more importantly than functionality on successful platforms. In addition, I found out that illegal price-fixing movement, new-town designation issues and thirst for information issues and thirst for information about local SNS was naturally occurred. Though rise and death of Local SNS, I found that accessibility, search-ability affected more importantly than functionality on successful platforms. In addition, I found out that illegal price-fixing movement, new-town designation issues and thirst for information about local area from massive newly moved population triggered recent Local SNS boom

since 2006. Apart from reasons of creation, as housing bubble burst down, Local SNS start to consider an improvement of living environments. Civic participation, Maeulmandeulgi through Local SNS was naturally occurred. Moreover, almost non-resident-run Local SNS suffered for managing spam posts. Although some paid services were free of spam, users did not likely to pay for online service. By managing Local SNS, resident leader could gain a responsibility and passion to local community. In addition, by operating Local SNS undergo mediate among residents and negotiate with local government and private enterprise, Local SNS leader was empowered.

Secondly, I conducted complete enumeration survey of Local SNSs targeting the capital area where Local SNS are most vigorously activated and about a quarter of Korean lives. I searched 181 Local SNS and visited each site to gather information about the number of users, daily visits, total posts and so on. Then, I analyzed a correlation between these factors and socio-demographic attributes. Results are plotted on the map using ArcGIS grogram. Traditional studies have demonstrated that small, homogenous groups are more likely able to create community building (Cardenas 2003; NRC 2002; E Ostrom 1999). Civil participation in dense urban areas had considered very challenging mission with conventional participation means. However, Local SNS provides massive public sphere regardless time and place. To attract public interest used to be believed a hard task. At traditional participation, activists or public officers commonly used banners and flyers to publicize local issues. While it takes many efforts and costs, in a dense urban area, people hardly glance to them. With Local SNS, extremely large number of participants had been able to get involved in discussions. In Sanbon 8 district project case, total 195 residents expressed their opinion. Average page views regarding physical Maeulmandeulgi projects were 394 while the highest page view was 716 out of 1471 households. In Dukso project case, total 136 residents expressed their opinion. Average page views regarding sidewalk improvement project was 395 while the highest page view was 839 out of 25,867 households.

Lastly, I extracted the 2 most successful Local SNS practice to demonstrate characteristics for new types of actors, relationships and interactions. Every 2 Local SNS has more than 15,000members (more than 20% of population) and records more than 20 daily posts. I selected one urban planning project per each Local SNS. Whole process of each project is completed through Local SNS and conducted longer than 3 years. Civic engagement process was explored by an e-board analysis, in-depth interviews and questionnaires. Authority of Local SNS comes from the number of membership. Dominant members in Local

SNS are lurkers who are typically a member of an online community who observes, but does not actively participate (Biship, J, 2007; Dennen V. 2008). Normally, in conventional participatory planning, lurkers were hardly observed because a huddle. Lurkers also play a role of potential participants. Even they do not participate at one point, they are keep connected to information. When some problems related with their life occur, large parts of lurkers will be involved in. Usually it was very hard to inform to lurkers in offline, especially in high-density urban area. In conventional participatory planning, building a sense of community is one of the most important starting stages. However, in Local SNS when some portion of strong relationship appeared, other large number of members felt uncomfortable. Therefore in successful Local SNS, there is usually a regulation to prevent showing their friendship in online board. They try to provide a loosen astrosphere for welcoming newcomers and silent participants. Young (30s-40s) and highly educated people lead Local SNS planning. They play a large part of roles of expert and NPO. As suburban area, capacity of local government is very limited. So they could not cover all parts of community planning issues. Expert-citizen sometimes plays a role of semi-public servants. Expertcitizen collects Local SNS member opinion and hand it to local government with wellorganized documents. Local government officers can attain high quality of public interest with regular meeting with expert-citizen. When they report some problem, local government can solve similar problems in their town. Many scholars understood participation process as a linear, which means one could go next step of participation after complete previous step like climbing a ladder. (Hugh Barton, 2003) However, unlike conventional understanding, as people can read past argument recorded in online board, Jump-participant and newcomers are frequently observed in ICT participation. When someone participated at certain step but disappeared for a while, then rejoin a debate, I name it jump-participation. Flow of ICT participation might be similar with an elevator than a ladder. Participants can join at any stage, and they can move forward skipping several steps like using an elevator