Spatially Integrated Online Social Survey System (SIOSSS) for Public Facility Management and Government Decision Support

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Spatially Integrated Online Social Survey System (SIOSSS) for Public Facility Management and Government Decision Support, Case study in Tsukuba City

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Abstract

Public participation in government decision making is key factor to achieve effective city and regional economic development planning. Gathering of public information and their opinions is critical task for city and local government. Recently, conducting of social surveys encounters various difficulties such as restriction of communication and accessibility that may lead to decrease response rates. Current social survey system either mail or telephone or internet merely collect non spatial information (in the form of text and tables) and un-updatable once survey is conducted. Additional skilled persons are required to convert these data into GIS ready dataset for further demographic studies in order to understand social behaviors and characteristics by spatial variations. Due to the increasing numbers of using GIS data in social sciences and decreasing numbers of public responses in social survey activities, we need to develop spatially integrated online social survey methods to overcome current problems by means of effective and attractive ways to the public. In the mean time, the growing numbers of internet users, advances in networking and spatial information technologies such as emergence of commercial high resolution satellite images and user friendly internet GIS like Google Map, now a day spatial information users is ranging from novice public internet users to expert desktop users. By utilizing all advances in spatial information technologies, we have implemented a test bed for Spatially Integrated Online Social Survey System (SIOSSS) which enables to collect, update, share and visualize the spatially integrated public survey data for governmental organizations and decision makers under the scope of Public Participation GIS (PPGIS) discipline, case study in Tsukuba City.

Keywords: Spatially Integrated Online Social Survey System SIOSSS, PPGIS, city planning and GIS for government.