크라우드소싱을 활용한 정책사업 모니터링 방안 연구

Architectural and Urban Policy Monitoring using Crowdsourcing

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SUMMARY

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The purpose of this study is to explore the possibilities of using crowdsourcing as a means of monitoring architectural and urban policy projects as a policy maker. The process of this study is as follows: First, we derive the concept and characteristics of crowdsourcing based policy monitoring through related theory and prior study review. Second, we analyze policy monitoring cases using crowdsourcing, and draw implications for monitoring system development, operation and management. Third, we develop a prototype system for crowdsourcing based policy monitoring and apply it as a pilot case study to derive its performance and limitations.

We explored concept and direction of monitoring of policy business based on crowdsourcing. The concept of crowdsourcing based policy monitoring is defined as "providing information on whether the policy is being planned, implemented, and evaluated in order to achieve policy goals by utilizing the ideas, technologies, and labor power of the public based on the online platform, and utilizing it in the efficient decision making process of the policy". The direction of the crowdsourcing based policy monitoring is divided into the planning stage of the online platform, the design and implementation stage, and the operation and management stage. First, in the planning stage, it is necessary to clarify the problems of the policy and the scope of the resolution, to identify the motivation

of the monitoring participants and to establish the compensation system, to determine the reflection level of the public idea. It is also necessary to prepare a risk management plan on the side. Second, in the design and implementation stages, consideration should be given to platform design considering user convenience, and all information disclosure related to policy projects. Third, in the operation and management stage, a multifaceted evaluation of the operation and management of the policy monitoring platform should be conducted.

We conducted case analysis for crowdsourcing based monitoring of policy projects. The following suggestions were drawn from domestic and overseas case analysis. First, in order to produce valuable and meaningful data, the policy data of government agencies should be disclosed transparently, and based on this, 'hybrid' platform design is needed. Second, it is necessary to realize the selected policy idea even if a small budget is invested. Third, it is effective to clarify the target hierarchy. Platforms targeting all citizens and all citizens are hard to sustain. Fourth, there is no need for government agencies to handle platform management. Fifth, it is effective in linking online and offline platforms. Sixth, it should support the formation of community based on communication among platform users. Seventh, it is necessary to reinforce publicity in both online and offline.

As a further step, we developed a monitoring prototype system. It aims to support the monitoring of the planning, enforcement and evaluation process of architecture and city policy projects by a large number of indefinite masses, not a few administrative officials or experts, to enhance the effectiveness of policy projects and ensure sustainability. We have set mandatory functions in consideration of the purpose of each project related to the policy monitoring. In order to confirm the possibility of utilizing crowdsourcing using online devices, we applied the pilot in the course of construction and urban policy project.

The pilot sites were designated as Gunsan City where many policy projects are completed or underway. As a result of the pilot application, we can confirm that crowdsourcing is an effective method for post evaluation and improvement of policy projects. It served as a tool for gathering ideas and opinions from various layers of the community. Policy monitoring using an online platform is more effective than offline evaluation in terms of cost, time, ease of analysis, and comparability between similar projects.

However, the limitations of the process of monitoring the policy through crowdsourcing were also found as follows. First, the elderly are not familiar with the use of smart devices. The use of the online platform in the region where the elderly occupation is high is considered to be an auxiliary platform of the offline platform such as the public hearing, the residents briefing session, the inhabitants' Second, crowdsourcing participation rate is relatively low. In order to overcome this, it is necessary to operate the platform in cooperation with local residents as well as with local school institutions. Third, it takes much time and effort to collect the collected data. There is a need to upgrade the system in order to automate and visualize the analysis process of the data collected through the online platform in the future.

As a conclusion, policy recommendations for revitalizing crowdsourcing based policy monitoring are as follows. First, it should be customized considering the crowdsourcing subject and type. Second, the online platform should be used flexibly in consideration of the specific purpose and timing of the public's ideas and opinions. Third, we need to establish ways to activate crowdsourcing through linkage with local schools. Fourth, local government civil and administrative cooperation regulations should include matters on online platform operation. Fifth, it should be linked with local government budget system. Sixth, in order to utilize crowdsourcing successfully, a culture in which citizens participate in policy decision—making process along with related technology development should be formed.

Keywords:

Crowdsourcing, Policy Program, Monitoring, Citizen Participation, Online Platform