

Title	シビックテック活動の発展と社会的要因 ICTを活用したプロボノを基盤とする社会課題解決活動を事例として
Author(s)	呉, 星辰
Citation	
Issue Date	2023-03
Type	Thesis or Dissertation
Text version	ETD
URL	<a href="http://hdl.handle.net/10119/18405">http://hdl.handle.net/10119/18405</a>
Rights	
Description	Supervisor: 敷田 麻実, 先端科学技術研究科, 博士

## **Abstract:**

ICT technology has enabled organizations, including businesses, to communicate more efficiently than ever before and to manage human resources and resources at relatively low cost. The benefits that ICT has brought to organizations include the ability to spread the benefits of efficiency and cost reduction throughout society and to improve existing services, as well as the potential to create innovative public services through new innovations. To this end, the free release of service codes and data to any entity that uses them is the base for the use of ICT.

While technologies such as ICT are changing our daily lives, science and technology have become so advanced and complex that it has become difficult for non-specialists to understand science and technology itself. In order to cope with increasingly complex science and technology, emphasis is beginning to be placed on "science and technology communication" for the correct understanding of science and technology. In addition, "pro bono" volunteer activities by professionals have been attracting attention in recent years as a social mechanism to effectively utilize expertise that cannot be used as a profession.

A typical example of social contribution realized through pro bono activities is the civic tech activities that emerged in the United States in 2009. Civic Tech activities have spread at a fast pace since 2009, but the results achieved through civic tech differ from country to country. Organizations based on the civic tech concept are developing around the world, but the administrative environment, power structures, inequitable participation due to class and regional constraints, and information gaps hinder the realization of the civic tech concept. As a result, civic tech activities have different levels of achievement depending on the country in which they operate.

This study focuses on so-called "civic tech activities," which are ICT-based pro bono-based social problem-solving activities that have become widespread due to the development of ICT and changes in the bearers of public services. First, the author identifies the characteristics of the outcomes of civic tech activities in different regions, and the social factors in each country that played an important role in shaping each of these characteristics are the subject of our analysis. Furthermore, the author identifies the mechanisms by which social factors in each country affect the outcomes of civic tech activities. Finally, the author examines the knowledge change and knowledge-based value creation included in the mechanism.

In conclusion, in an ideal situation, the first prerequisite is for the government to issue policies to promote open government, and the public administration should be prepared to adapt to open government in terms of public access to administrative data and public decision making based on those policies. At the same time, citizens are influenced by policies on open government and begin to understand the concept and principles of open government. Subsequently, if the public administration can implement open government policies and actions, administrative data can be made available to the private sector, and the private sector can enter into public services. Furthermore, as the public administration changes, citizens will realize the data and new services

made public by the administration and will voluntarily move to citizen science actions such as data collection and utilization of the platform. As a result, participants in civic tech activities will be more willing to work on promoting open government and will change their tendency to contribute to the promotion of a data-driven society by actively creating platforms.

Keyword: Civic Tech, Knowledge Science, Open government, Pro bono, Social Management