Developing the grasping methods of existing wooden detached housing specifications whose design drawings at the time of construction have dissipated

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1. Foreword

As it is difficult to grasp the design specifications at the time of investigations on present conditions and preliminary investigations of renovation plans, since documents like design drawings at the time of construction for many existing houses have dissipated, NILIM has structured a support system that can be used in the duties of site investigations, and developed an effective grasping method of the design specifications. .

2. Acquiring, arranging data related to design specifications

In order to arrange the data according to each regional and building generation's design specifications, design specification investigations were carried out for existing houses whose documents such as drawings were available. And through the help of home builders with roughly 30 years experience providing municipal finance housing etc., data regarding housing structure and the materials and construction methods used by generation, was recorded/acquired from a total of 55 builders and 1,247 cases from Hokkaido and the Tohoku, Kanto, Chubu and Kyushu areas.

3. Developing effective grasping methods for design specifications

In order to support site survey work carried out by contractors and architect offices, a support system called "Materials/construction method database system" was developed to secure information in line with workflow like site surveys, by presuming basic information and specification data for building survey subjects, and through site surveys. The main functions are the inputting of building specification information of building survey subjects, the inputting of deformed items and the outputting of survey results as a report. Taking into consideration its use on tablet devices carried onto the site, it is expected to run in ASP format. The partition editing of building data was enabled, taking into consideration the actual duties pertaining to surveys distributed among multiple individuals. As well, a standalone use function was also prepared in the case that the communication environment at the location is bad. As well a records arrangement function, a function that registers photos, which are extremely important survey records, taken at the site for each part, was also included. Furthermore, taking into consideration the linked use with the "Housing history" management system, extensibility using a common ID is also being considered.

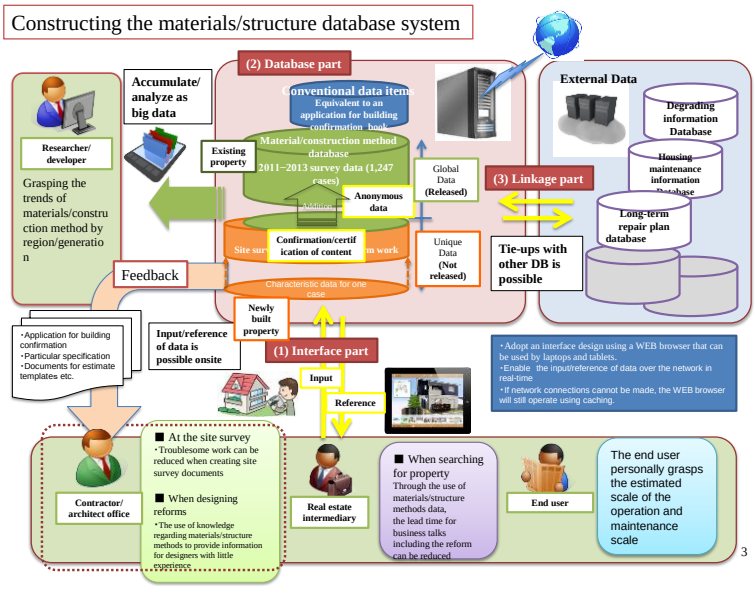

Figure 1:Constructing the materials/structure database

4. Conclusion

The materials/structure method database system, from a business support standpoint, is scheduled for a test operation after user registrations have been received. In the future, through feedback of actual data of the materials/structure method for each part acquired from site surveys, the information aims to be used as a shared knowledge base.

(Reference)

1) Comprehensive Technology Development Projects
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