

Inclusive Disaster Prevention: Evolving Online Support Structure

Toyonaka City, Osaka Prefecture



Background

There are three main reasons why Toyonaka City decided to introduce an online safety confirmation and individual evacuation plan management system.

Firstly, the mayor was strongly aware of the importance of confirming residents' safety in times of disaster, and considered it necessary to create an effective and swift ICT-based safety confirmation system.

Secondly, we had been receiving feedback from local voluntary disaster prevention teams, welfare groups and other organisations involved in confirming residents' safety in times of disaster that called for transition to an online system. (Examples of feedback: 'There are limits to confirming safety using paper documents and phone calls' and 'We need a more accurate and immediate method'.)

Thirdly, as the ongoing creation and management of individual evacuation plans by our welfare department were previously carried out on paper, we were confronted with the challenge of time-consuming information updates and sharing, which led us to recognise the critical need to digitise and centrally manage evacuation plan information.

Against this backdrop, we decided to introduce an online safety confirmation and individual evacuation plan management system as part of our ongoing initiatives to ensure the safety and well-being of citizens.

Objectives

Toyonaka City is currently creating a structure for accurately grasping the status of 'residents in need of assistance in evacuation' in times of disaster or when a disaster is anticipated, and for carrying out routine monitoring activities and swiftly providing evacuation support and safety confirmation in times of disaster. We previously used a system based on lists of residents in need of assistance in evacuation, but decided to upgrade the system to establish a more effective support structure.

Through the system upgrade, we added the following new functions: one for creation and managing 'individual evacuation plans' that specify the support details and people involved for each resident in need of assistance in evacuation, and one that enables local support providers to confirm the safety of support recipients in times of disaster using a smartphone.

This new system significantly enhances our efforts to build a mutual assistance-based evacuation support system for disaster situations, and also facilitates cooperation with local communities and related organisations.

Project Outline

- In order to provide swifter, targeted support to residents in need of assistance in evacuation in times of disaster, we upgraded the system based on lists of residents in need of assistance in evacuation with an individual evacuation plan creation and management function, as well as a

smartphone-based safety confirmation function for use by local support providers.

- The system enables local support providers to confirm the safety of support recipients on their own smartphones and to share that information immediately, which is expected to facilitate cooperation between the municipal government, local communities and related organisations.
- Updating and sharing of information was challenging, as individual evacuation plans used to be managed on paper, primarily by the welfare department. With the introduction of the new system, we can centrally manage plan-related information online, which in turn enables us to immediately confirm and share the necessary support-related information in times of disaster.
- Utilising systems such as this one, Toyonaka City is committed to building an inclusive disaster response framework, as well as working in unison with residents and local communities to enhance our city's disaster resilience.

Features and Innovations

- 1) Enable local support providers to confirm the safety of residents in need of assistance on a smartphone, thereby achieving an ICT-based mutual assistance system.
- 2) Enable real-time information sharing by the online creation and central management of individual evacuation plans.
- 3) Facilitate cooperation with related organisations through an integrated system for evacuation support, safety confirmation and plan management.

Results of the Project

The new system is expected to significantly enhance our structure for providing support to residents in need of assistance in evacuation in times of disaster.

First, central management of individual evacuation plans and safety confirmation information online ensures a swift initial response in disasters, which reduces the risk of being unable to evacuate in time.

This facilitates tasks such as confirming the safety of residents in need of assistance and prioritising of evacuation support.

Local support providers having the ability to confirm the safety of residents in need of assistance on a smartphone is expected to increase the effectiveness of the mutual assistance, and foster ties and a sense of security among residents. In a questionnaire conducted two years ago with participants following a drill utilising the system (app), approximately 87% of respondents stated that they would like to use the app in an actual disaster. While some concerns were raised regarding the digitalisation of the system, we received positive feedback reflecting appreciation for the system's capability in enabling swift response as well as real-time information sharing with representatives responsible for gathering local information.

Furthermore, this initiative contributes to the creation of individual evacuation plans and the strengthening of the information sharing structure, which were made duties of endeavour under the revised Basic Act on Disaster Management. We believe it offers significant benefits by alleviating the administrative burden while ensuring legal compliance.

Issues, Problems and Responses

While the new system is expected to enhance our evacuation support system, it is also expected to present several challenges.

First, as not all local support providers are used to operating ICT devices, training sessions and related support will be necessary to ensure a level of ICT literacy for the implementation of the smartphone-based safety confirmation system.

Additionally, since the system handles the personal data of residents in need of assistance, it is essential to achieve both secure management and smooth coordination of information to ensure swift and appropriate information sharing in times of disaster. To ensure the system's operation, it is also essential to conduct drills and foster proficiency in

operating the system among relevant personnel on a regular basis.

Another major challenge is to enhance the quality of support across the entire city, as the support system's readiness and disaster prevention awareness among residents still vary depending on the area.

By diligently addressing these challenges one by one, Toyonaka City will continue to build a mutual assistance system that ensures peace of mind for all citizens, and to enhance its disaster resilience.

Future Developments (expected effects and project vision and issues)

With the new system, we are steadily establishing a structure for providing evacuation support and conducting safety confirmation in times of disaster more swiftly and reliably. Going forward, it is vital to increase the coverage of individual evacuation plans, continuously revise and promptly update them to build an operational system that will allow us to respond to disasters without delay.

The routine monitoring activities by local support providers, along with efforts to ensure the support structure's effectiveness, are expected to strengthen ties within local communities and help systems of mutual assistance take root naturally. This will contribute to ensuring safety and security not only during disasters but also in everyday life.

Through these initiatives, Toyonaka City aims to become an inclusive city where everyone can live safely and with peace of mind. To this end we remain committed to building a sustainable disaster prevention and welfare framework utilising digital technology.

Websites for Reference

<https://jpn.nec.com/corporateblog/202402/01.html>

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