

Towards provision of information from the customer's viewpoint in a disaster お客さまの視点に立った災害広報に向けて

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1. Introduction

On March 11, 2011, the Great East Japan Earthquake caused an extended suspension of water service. During this period, customers demanded prompt and specific information on the restoration schedule and emergency water supply operations.

Last year, Sendai Waterworks Bureau reported on our provision of information to the public during the disaster. This time, we conducted two new surveys aimed at providing information to the public during the disaster from the customer's viewpoint: (1) Analysis of call center feedback, and (2) Hearing at a water service monitor meeting. In this paper, we report on the results of those surveys.

2. Analysis of and trends in customer feedback

(1) Analysis of feedback to the call center

The number of calls to the call center immediately after the earthquake was about 96,000 in March alone. It was about 3.5 times that of the previous year and the response rate did not reach 20%.

Immediately after the earthquake, most inquiries were about securing water, such as the emergency water supply and the restoration schedule for water service. As suspension of water service gradually ended and having announced the restoration schedule, there was an increase in other types of inquiries, such as details of the restoration schedule, leakage-of-water reports, plumber information, and our response to radioactivity.

Since before the disaster, we in Sendai City have classified matters which are difficult to address at the call center as "opinions and demands." From this data, we explored more deeply the information for which customers were searching at the time of the disaster. As a result, we understand that they requested more detailed information like the reason for water outages and restoration priorities.

Most of the requests were from elderly and disabled people. Their main complaints about the emergency water supply were as follows:

- The water station is far away, and it is difficult for us to carry the heavy water to our house.
- I would like you to establish a water station near my house.
- I would like you to deliver water to houses.

(2) Making use of the monitor meeting for a hearing

Sendai Waterworks Bureau has held monitor meetings on water service since 1972. The monitors deepen their understanding of our water service by participating in workshops and water facility study tours. And we formulate policies for the improvement of our water service based on their frank opinions and suggestions to our business. Every fiscal year, we advertise for 40 monitors who are residents of Sendai and at least 20 years of age.

In May 2014, we had a hearing on provision of information to the public during the disaster taking advantage of the monitor meeting to collect the actual voices of customers. Before the hearing, a questionnaire about acquiring information on water services and storing emergency water was sent to monitors. We received replies from 32 of 40 monitors. From their answers, we compared the ideal and the reality for disaster information media. Results showed that 49% of respondents obtained information from

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the newspaper, TV and radio during the Great East Japan Earthquake. In addition, 8% came by information from their community associations. As for the sources as easy to use when a disaster occurs in the future, 67% of respondents rated the newspaper, TV and radio, and 13% chose their community associations. Furthermore, 81% of respondents were storing emergency water in their homes.

The hearing was held by 23 monitors and 8 Waterworks Bureau staff members. Monitors were divided into four groups, and two staff members joined each group as coordinators. After a one-hour discussion, staff members compiled the participants' opinions and reported on them. The main opinions were as follows:

- Radio is an effective tool to get information during a disaster, because it is in everyday use and is not affected in a blackout.
- A community-based social communication network, such as word of mouth from acquaintances or a neighborhood association notice board, is very useful.
- Those networks need to be in place before a disaster.

There is broad awareness among customers about retaining bath water for emergency use in case of a suspension of water service. However, they do not store 3L of emergency drinking water per person per day for seven days, which is the quantity we recommend. We distribute a public relations brochure named H2O to all families. It includes disaster information such as emergency water supply facilities and storing water at home for an emergency. However, customers' recognition of this information is regrettably low.

3. The role of providing information to the public during a disaster from the customer's viewpoint

(1) Providing information to the public through interactive communication

As a result of the two surveys, we were able to grasp the concrete requests in which customers needed more detailed information than we provided. We also understood that radio and word-of-mouth networks were effective ways to obtain information. Moreover, it turned out that customers hardly recognize our information.

As we were able to determine concrete requests and the problems with current one-way communication, we have to consider providing information to the public during a disaster through interactive communication with customers.

(2) An appeal for self-help and cooperation

In the disaster, elderly and disabled persons requested the Waterworks Bureau to set up emergency water stations near their houses because it was hard work for them to carry heavy water from the stations to their houses. According to the hearing at the monitor meeting, interest in storing drinking water (self-help) and supporting each other in the community (cooperation) increased.

Although interest increased, the quantity of stored drinking water wasn't enough. We have to appeal to customers to engage in self-help and cooperation. From April 2014, we began to distribute bottled water at events in order to promote the storage of drinking water.

4. Conclusion

Two new surveys were conducted in order to consider the role of providing information to the public during a disaster from the customer's viewpoint. As a result, we were able to grasp concrete requests from customers and the problems of one-way communication. In particular, we were able to directly hear the precious voices of our customers at the monitor meeting. From now on, we will continue to consider what information is necessary for customers and which media are effective in a disaster by engaging in interactive communication with customers. For that reason, we have to continue appealing to customers to engage in self-help and cooperation.