



Adapting to the Diversification of Consumer and Societal Needs through Utilizing ICT

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Introduction

As a partner company of the Tokyo Metropolitan Waterworks Bureau, PUC supports the improvement of both customer satisfaction and management efficiency with regard to customer services at Tokyo Waterworks through utilizing ICT as well as outsourcing.

In Japan, various changes in the environment are promoting the diversification of the needs of consumers and society at large. The company supplying water to Tokyo, Tokyo Waterworks, which supports people's lives in a metropolis with a population of some 13 million, is also faced with a growing need to adapt to such changes.

Results & Discussion

Changes in the environment with the development of ICT

- Internet connectivity has released people from the constraints of time and location, and this has been achieved by the widespread use of "mobile information devices," such as cell phones and smartphones (household penetration rate for 2012: 94.5% [1]).
- Diversification of means of communication, including social media such as social networks and blogs.
- Accelerating gap between generations in the usage of the Internet (13 to 49 years of age: 90% or more, 60 years of age and older: 75% or less [1])

Diversifying consumer and societal needs

1. Changes in consumer needs
Increasing need for more convenience
 - "Anytime/anywhere access": Sending and receiving information whenever and wherever necessary
 - Actively searching for information from the vast stores of data on the Internet
 - One-stop service allowing completion of all required administrative procedures
2. Changes in societal needs
Based on the experience of the Great East Japan (Tohoku) Earthquake, there is an increasing public interest in information for checking safety and security during disasters.
 - Quick acquisition of information about disaster situation, scope of impact, and forecasts of timescale for recovery
 - Collection and provision of information through multiple means of communication

Initiatives with regard to customer services at Tokyo Waterworks

Using our water-payment collection system as a common ICT platform, we provide customer services at Tokyo Waterworks that meet the needs of water users.

Figure 1. Provision of customer services at Tokyo Waterworks

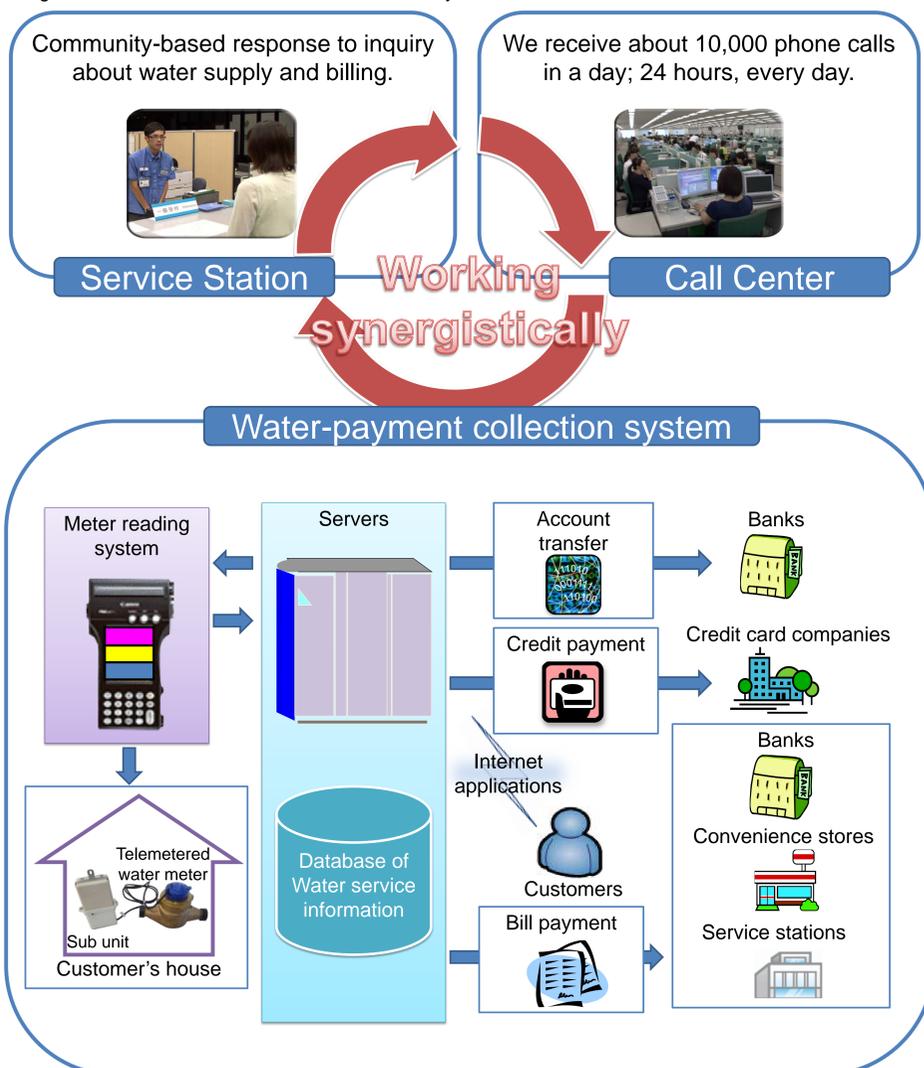
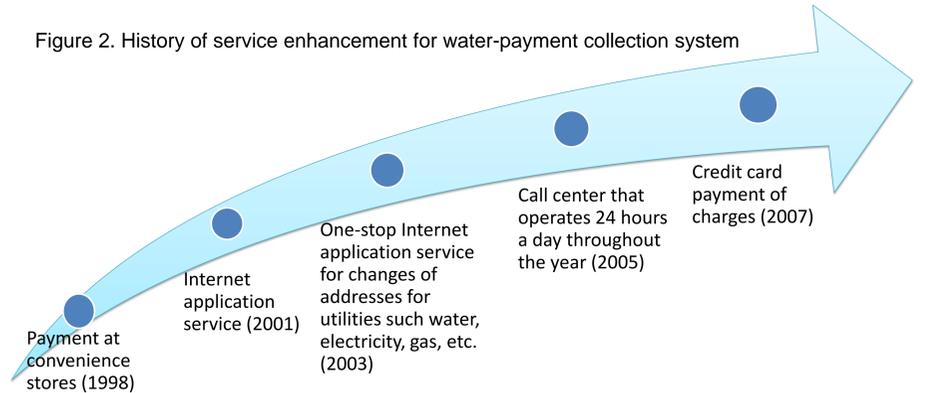


Figure 2. History of service enhancement for water-payment collection system

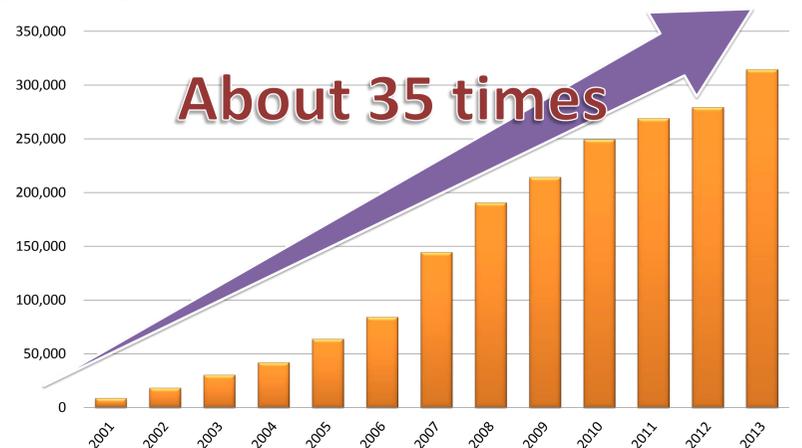


Adapting to consumer and societal needs

1. Adapting to consumer needs

We have implemented initiatives to increase customer convenience by making services available any time and at any place through making them easily accessible through the Internet.

Figure 3. Changes in the number of times that Internet-based customer services are used



2. Adapting to societal needs

Using a call center that provides telephone information 24 hours a day throughout the year, we respond to various inquiries about water supply during disasters or other emergencies. After the Great East Japan (Tohoku) Earthquake struck in March 2011, we responded to inquiries.

Figure 4. Call Center: Comparison of number of calls received

Year	Average after the earthquake (3/11-3/31)
2010	15,325
2011	18,068

Challenge and outlook for the future

Considering future trends in consumer needs, we predict that there will be a growing demand for the provision of information that meets users' individual needs. At the same time, with regard to societal needs, there will be a growing demand for services through mutual communication. Our challenge is to continuously adapt to these changing needs.

To address this challenge, we aim to implement the following measures for the future.

- Enhancing information to meet water users' individual needs (amounts of water consumed, daily changes in water charges, comparison with data for last year and the year before, etc.)
- Gathering of information from water users during disasters, and provision of information about the forecasts of timescale for recovery from water outages and about emergency water-supply sites
- Information collection and provision from and to families with elderly persons or persons in need of nursing care
- Development of new services to adapt to users' needs by analyzing data on opinions and requests from water users
- Provision of a secure Internet connection environment by implementing on an ongoing basis measures against sophisticated cyber-attacks and establishing a more robust information security infrastructure

Conclusions

We believe it is important for water supply companies to provide on an ongoing basis services that meet the needs of water users, while adapting to the ever-changing societal environment. In the future as well, we will meet the needs of water users through utilizing ICT and will provide services that deliver safety and security to water users via Tokyo Waterworks customer services.