

Topics

Comprehensive Lifestyle Support Service Using IT and TV for Bidirectional Communication

The comprehensive lifestyle support service uses IT and the transmission of data to TVs for bidirectional communications with specific individuals and service providers such as private companies and government institutions. Uses for the service include disseminating information, advertising, and conducting surveys, with the collected information also available for use. This article describes the functions of the service and how it works, and the plans for its future.

INTRODUCTION

A challenge faced by service providers (private companies and government institutions) that use only the unidirectional distribution of information is the inability to determine customer needs due to inadequate communications with them. The Japanese government, meanwhile, has encouraged the use of information technology (IT) for bidirectional communications in its “Declaration to be the World’s Most Advanced IT Nation.”

These background factors mean there is a growing demand for services that provide bidirectional communications with specific individuals. In response, Hitachi has proposed a service based on providing bidirectional communications using IT and television (TV), a medium familiar to everyone regardless of age.

SERVICE DETAILS

The service delivers information to service providers and subscribers via a bidirectional communications service platform system supplied by Hitachi. Subscribers who receive information from a service provider can respond to it using their TV remote control. Service providers can also designate a service operator and use the system to link subscribers to that service operator, providing a means to use TV data transmission to inform subscribers about all sorts of different services (such as beauty, food, information, travel, and health services) (see Fig. 1).

HOW THE SERVICE WORKS

The platform system receives area information to enable content to be split by region and sent to subscribers via broadcast by having subscribers

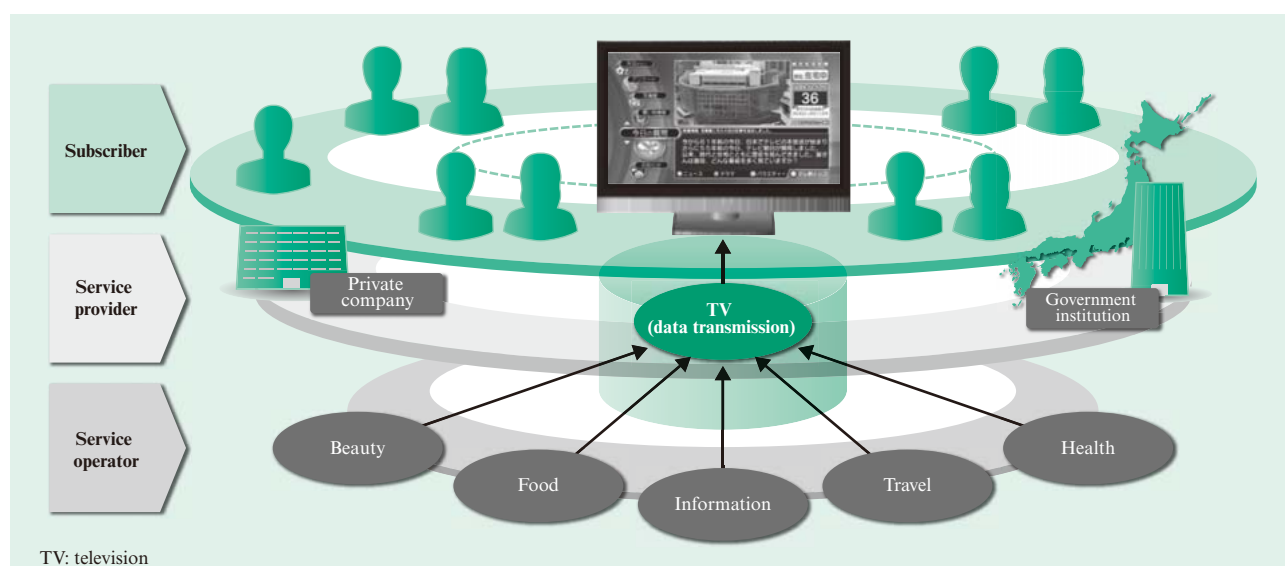


Fig. 1—Service Overview.

Service providers can use the service to implement bidirectional communications services. Service operators can send information to subscribers.

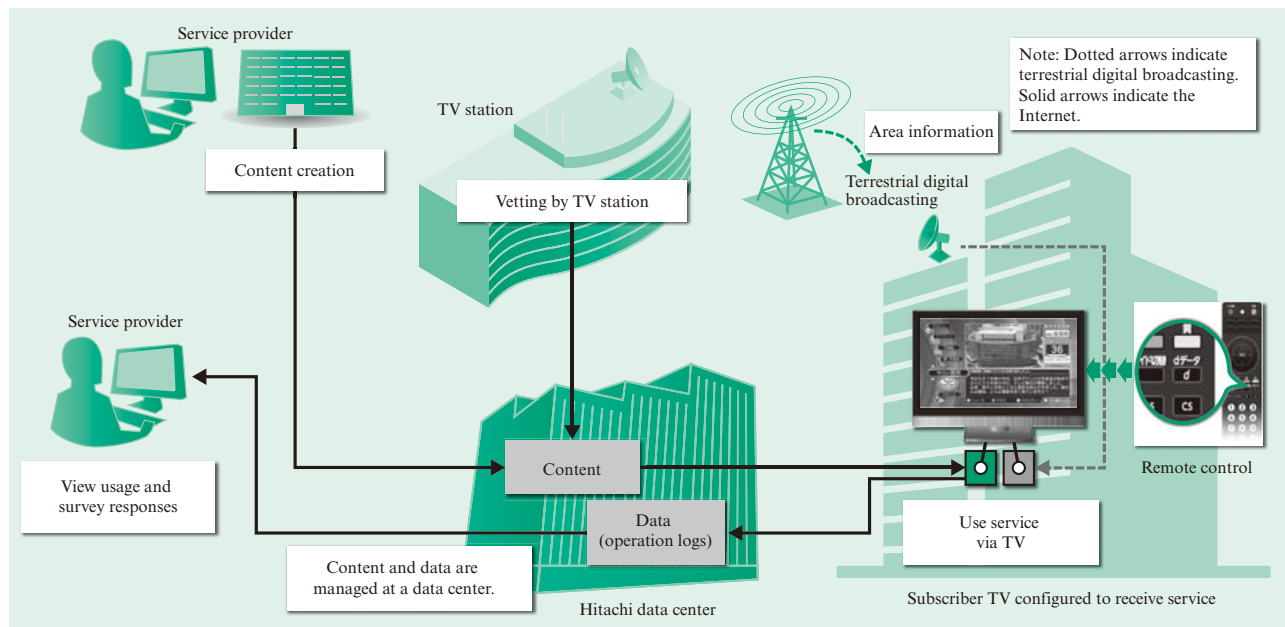


Fig. 2—How the Service Works.

Services are provided by using data transmitted via the Internet in conjunction with participating terrestrial digital broadcast channels.

select a channel that supports the service on a TV that is configured to use the service. Based on the area information, the content specified by a service provider is displayed on the TV's "data broadcast" screen via the Internet. Subscriber usage and responses are collected at a data center and are available to the service provider (see Fig. 2).

The platform system uses Hitachi Cloud to provide a highly reliable and secure environment. And, because on-demand services are available, system resources can be progressively expanded to keep up with changes in the number of subscribers.

MAIN SERVICE FUNCTIONS

Providing Information

Service providers can display information on the service's screen of the subscriber's TV by specifying when they want the information to appear. Similarly, the service operator can display the information it chooses.

Surveys

Service providers can survey subscribers by using the system to input a question to present to subscribers and providing four options for the answer. For subscribers, responding to the survey is simply a matter of using the color buttons on their remote controls.

Using Information

Service providers, service operators, and others supply information and collect subscribers' responses to surveys.

This information can be used to improve customer satisfaction by identifying latent demand and supplying services that are closely matched to needs.

EXAMPLE USES FOR SERVICE

Example Use of Service to Provide Information

Service providers of membership schemes can use the service screen on the TV to provide information

to their subscribers (members), such as a members' magazine or information about home renovation.

They can also use the survey function to leverage subscriber preferences data.

If a survey is about health conditions, it can be used to assess subscribers' health. As the latest information can be displayed in tickertape format, functions are provided to prevent subscribers from missing out on seeing something. To keep subscribers from losing interest, points can be awarded for answering surveys as a way of encouraging service use.

Providing Shopping Information

Service operators can deliver coupons or other forms of advertising for products or services to the service screens on the subscriber's TV. By displaying a quick response (QR) code or uniform resource locator (URL), the service can act as a prompt to subscribers to use a smartphone or other device to connect to the Internet and visit a site with more detailed information. This has the potential to be used as a marketing tool that can ultimately encourage subscribers to visit the actual store that is running the campaign or other initiative being hosted by the service operator.

Other Example Applications

Another example application is surveillance whereby service providers can view the TV operation logs of subscribers. If so configured, family members can also use a smartphone or other device to check on TV operation logs.

FUTURE OUTLOOKS

Hitachi plans to make enhancements to the platform system in the following ways.

Integration with Digital Devices

In accordance with the growing diversity of user needs and improved literacy, Hitachi will strengthen the integration of information through multi-channel, smartphones, wearable devices, and other media.

New Business Models

The big data collected by the service includes data on subscribers (logs, reactions, and responses). Hitachi aims to develop business models for utilizing this data in marketing and promotion by analyzing it and presenting it in terms of the behavioral characteristics of subscribers.

Global Activities

Hitachi intends to establish ways of using bidirectional communications to provide information, conduct surveys, and so on in the form of a new business model and deploy it first in Asia, and then throughout the world.

REFERENCE

- (1) Hitachi News Release, "Joint Demonstration Project with TV Asahi for Comprehensive Lifestyle Support Services that Include Providing Community Information and Surveillance Support" (Jan. 2014), <http://www.hitachi.co.jp/New/cnews/month/2014/01/0124.html> in Japanese.

ABOUT THE AUTHORS



Nobuo Takahashi

Government & Public Systems Department 5, Government Solution Operation 3, Government & Public Corporation Information Systems Division, Information & Telecommunication Systems Company, Hitachi, Ltd. He is currently engaged in managing the planning and implementation of the comprehensive lifestyle support service.



Mika Izuo

Government & Public Systems Department 5, Government Solution Operation 3, Government & Public Corporation Information Systems Division, Information & Telecommunication Systems Company, Hitachi, Ltd. She is currently engaged in development planning and operational support of the comprehensive lifestyle support service.



Kazuyoshi Hirata

Social Innovation Department, Hitachi Consulting Co., Ltd. He is currently engaged in promoting the comprehensive lifestyle support service.