Interactive Digital Signage Solution using Floating Content

Taichi Tsutsumi

In the past several years, digital signage that utilizes large-screen TVs to display a variety of contents has been on the rise. They can be found providing numerous information including advertisements and weather reports along with facility guides at such locations as train stations, banking facilities and commercial facilities. The type of contents varies widely from still images to videos/audios and entertains the viewers with its highly attractive display.

However, digital signage has so far only unilaterally displayed contents, but OKI has developed a signage system that viewers can actually touch and enjoy. This article introduces an interactive signage (floating content) system that brings two-way capability to what was once a display-only digital signage.

Digital Signage Market Trend

Until now, digital signage market consisted of various solutions that display manufacturers provided as a marketing tool for their products. Each manufacturer incorporated a variety of functionality into their products, and these displays have become noticeable in many shops and throughout cities.

Recently, manufacturers have begun selling digital signage systems with additional features such as products that use touch panel screen to allow viewers to make selections or that link with a camera to display an image of the viewer dressed in virtual clothing, thus providing augmented reality (AR) 1).

However, none of the systems has been in use on a continuous basis.

Floating Content System

(1) System Features

Grasping the current market trend, a new product (floating content) that incorporates two-way capability into the digital signage systems was developed to attract more viewers while ensuring the system implementer with return benefits.

Floating content system employs a touch panel to convert previously sold digital signage solutions (broad messengers) into a two-way digital signage system enabling unique expressions. Sign viewers can touch the displayed contents to receive more detailed information or coupons. System implementers will be able to obtain marketing information such as the viewers’ interests.

(2) Screen Image

A sample screen shot of the floating content system is shown in Figure 1.

The sample is a content developed for financial institutions and includes an interactive screen combined with an interest rate display and ticker.

(3) System Overview

The floating content signage system was commercialized as a stand-alone unit for single-site installation. Study is planned for an online version that will enable contents to be managed and distributed from a management center.

Stand-alone unit consists of a large-screen TV and a control terminal (PC). The display contents are transferred to the control PC using USB memory.

The planned online version will place an authoring terminal and distribution server for site management/contents distribution at a management center where operation and management of each site can be conducted.
Moreover, the floating content signage system is not for simply displaying contents. It is equipped with interfaces for various devices such as a printer or card reader making system configuration to match customer needs easy. Additionally, the saved operation records can reveal which contents were selected to what extent, thus provide the system implementer with a situation that is beneficial to future business.

An input tool for easily entering display contents is available. It is also provided with a mechanism to accept regional information from the system implementer and then proceed to operate on its own.

**Summary**

Floating content signage system has been introduced. The use of digital signage is expected to expand to a variety of scenes, and in that expansion, the floating content signage system with its two-way capability will likely see wide deployment regardless of the market type.

Starting with improved attraction of customers to stores, the implementation of the floating content signage system will result in a fee increase for provided information and evocation of customers’ potential interests and needs.

---

**References**

1) SONY, Interactive Signage MITENE

**Authors**

Taichi Tsutsumi, Banking Solutions Development Department-1, Financial Systems Division, IT Solution & Services Business Division

---

**Glossary**

**Digital signage system**

An advertising medium that uses digital display and communications technology to display images or information on a flat-panel display or a projector.

**Interactive signage**

A digital signage system that incorporates two-way capability and allows viewers to select contents displayed on the flat-panel display using a touch panel or other feedback devices.

**Augmented Reality (AR)**

Term referring to either the computer technology that extends the real environment perceived by people or the extended real environment itself.

---

![Figure 2 Features of Floating Content Signage](image)