

**Examples of Digital Signage Deployments by  
East Japan Railway Company**

**December 13, 2011**

**East Japan Marketing & Communications, Inc.**

## Station Media: Ads inside stations

Signboards, posters, spot media, etc.



## Train Media: Advertising on trains

Advertising posters in trains, ads above the windows, ads on stickers, ads on the exterior, etc.



Photos: /jeki website

## ■ Characteristics

- 1) **Effective regional media:** Can be deployed in any specific region.
- 2) **Media with extensive coverage of the Tokyo Metropolitan Area :** Reach is broad.
- 3) **Compelling visual contact/repetitive contact :** Consumers are exposed to ads repeatedly along with the flow line of their daily life.
- 4) **Effect of imagery transfer:** Recollection rate via other media is high.
- 5) **Recency effect:** Contact takes place right before purchase.

## ■ Needs

- 1) **Advertising expressions in different time slots and geographical areas**  
Examples: Coffee in the morning; healthy beverages in the daytime; alcohol in the evening;  
desire to place an ad in specific areas or stations.
- 2) **Interactivity**  
Necessary information can be provided to users when they need it.
- 3) **Understanding of the attributes of users**  
Is the message conveyed to the intended users accurately?

**Drive to Digitize Advertising Media**

## Advantages of Digital Signage

### ■ Ability to respond to the changing needs of clients

- 1) Location- and time-conscious exposure : More meticulous plans for advertising
- 2) Coordination with other media: TV, Web, mobile, SNS, etc.
- 3) Strengthened accountability: Broadcasting log and computer-based readership score.
- 4) High cost performance: Use of a single source for multiple applications
- 5) Creation of news values: Use of AR, 3D, etc.

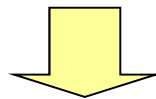
## Approach to Digitization

### ■ Replacement of conventional media as the main approach

- 1) Train Channels in trains => Digitization of ads above train doors
- 2) J AD Vision inside stations => Digitization of posters and signboards

## ■ Characteristics

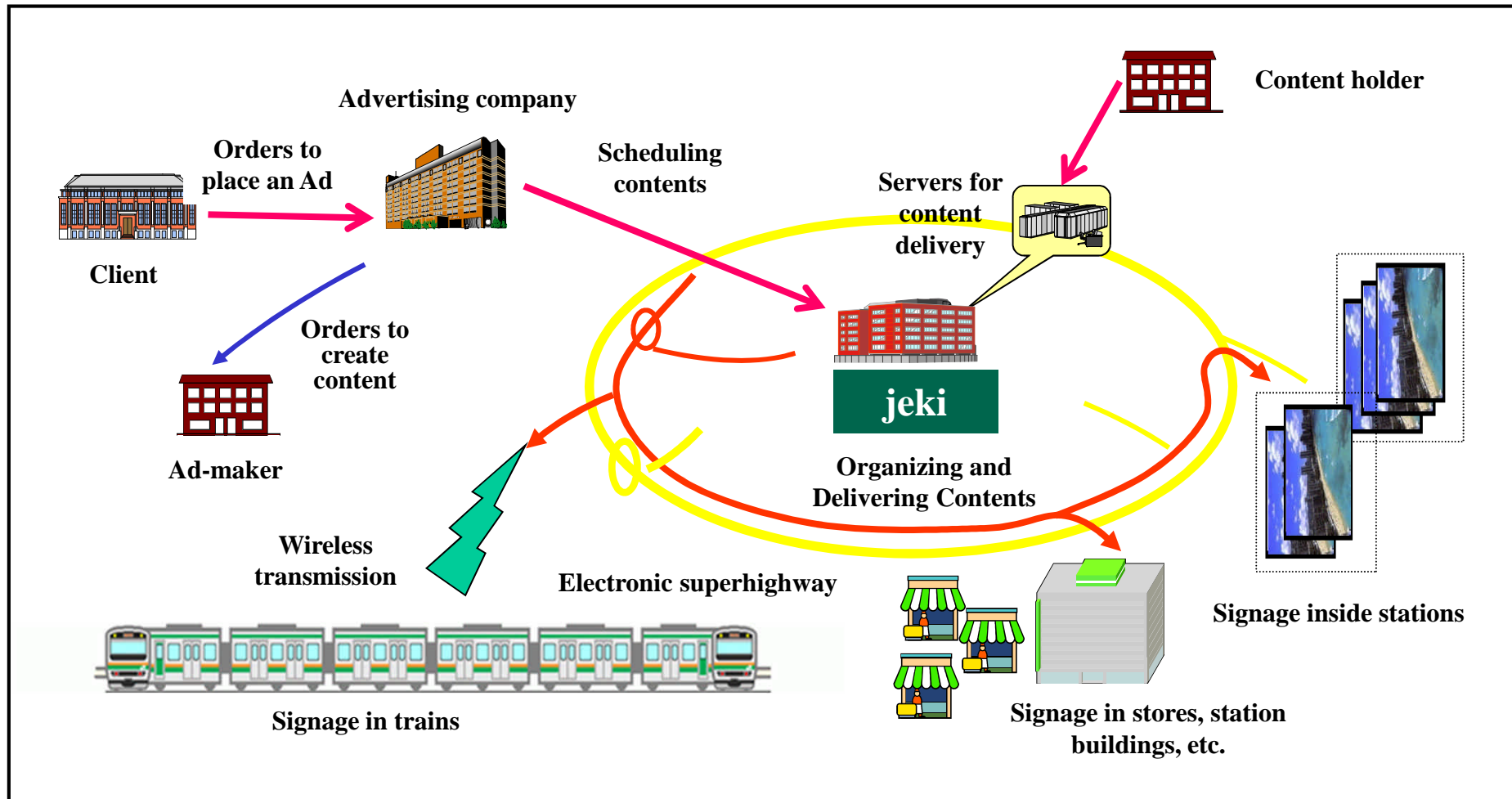
- **Centralized management and batch delivery:** Able to consolidate the management of media with large volumes of advertising.
- **Time sharing:** Able to present different contents in different time slots.  
**Examples:** Coffee in the morning; healthy beverages in the daytime; beer in the evening
- **Selection of geographical areas:** Able to show different contents in different areas.  
**Examples:** Differentiation depending on the characteristics of stations and the time of contact
- **Support of diverse media:** Able to deliver and display various forms of digital data including video, still image, Flash, and HTML.



■ **Able to Respond to Client Needs Flexibly in Transit Advertisements**

# Examples of Digital Signage Deployments

## Image of the network (Advertisement model)



# Examples of Digital Signage Deployments

## Signage in trains: Train Channels

(JR Yamanote Line, Chuo Line, Keihin Tohoku Line, Narita Express, Keiyo Line)



Train Channels on the Yamanote Line



On the Chuo Line



On the Keihin Tohoku Line



On the Narita Express



On the Keiyo Line

○LCD screens installed above train doors to deliver videos.

○2002: Launched on new train carriage on the Yamanote Line in sequence.

○2006: Launched on the Chuo Line.

○2007: Launched on the Keihin Tohoku Line.

○2009: Launched on the Narita Express.

○2010: Launched on the Keiyo Line.

Yamanote Line: 52 train formations x 88 screens = 4,576 screens

Chuo Line: 68 train formations x 80 screens = 5,504 screens (sum of train formation patterns)

Keihin Tohoku Line: 83 train formations x 80 screens = 6,640 screens

Narita Express: 22 train formations x 32 screens = 704 screens

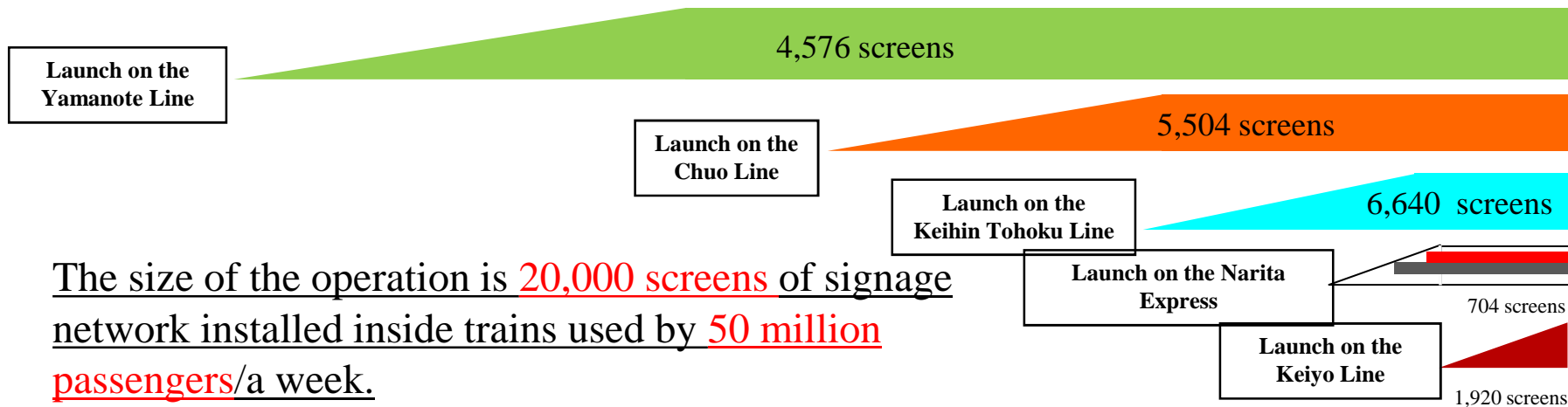
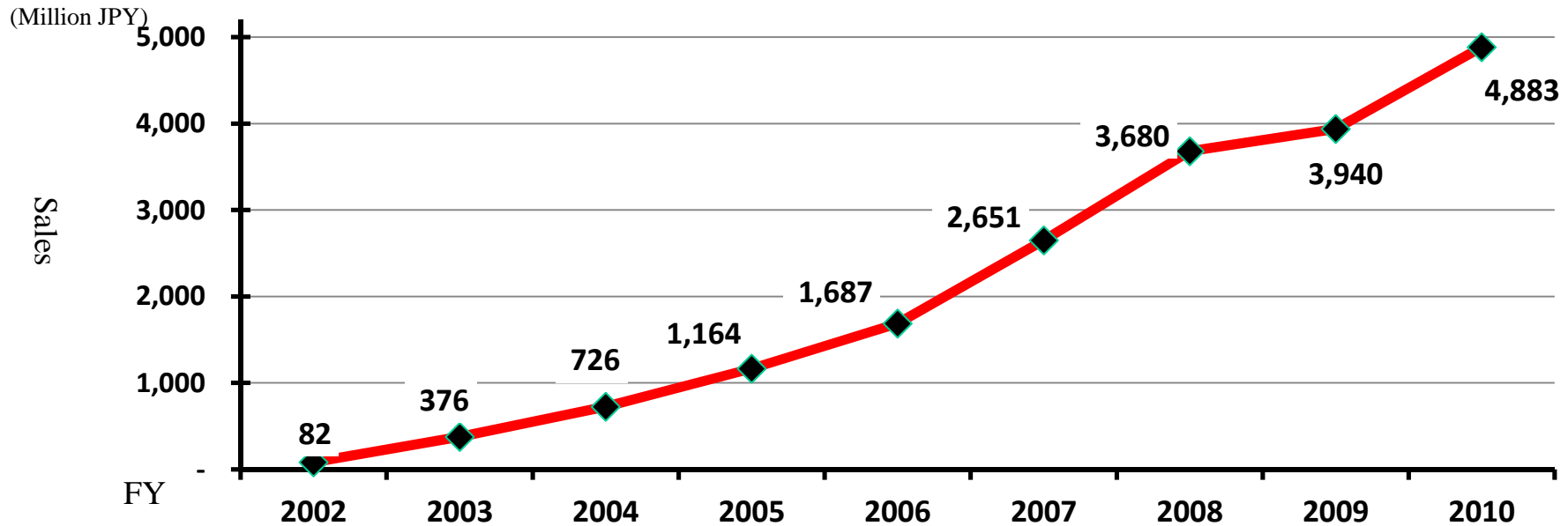
Keiyo Line: 24 train formations x 80 screens = 1,920 screens

(installation to be completed in August 2011)

Expected  
Size: 20,000  
Screens

# Examples of Digital Signage Deployments

## Train Channels: Trends in sales and number of screens



The size of the operation is 20,000 screens of signage network installed inside trains used by 50 million passengers/a week.



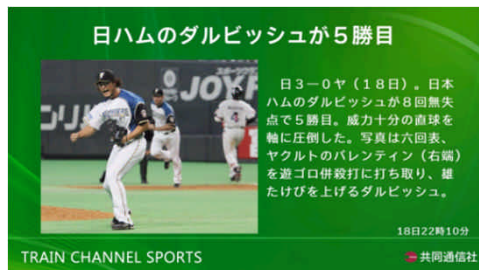
# Examples of Digital Signage Deployments

## Train Channels: Examples of programs

### Real-time content



Video news clips



Still image news clips



Weather reports

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### Entertainment and other content



Quizzes



Local information



Entertainment  
(Game)



Trivia (Quotes)



Trivia (Space)

### Characteristics of Content

- One program lasts for 60 seconds in principle.
- The ratio between content and commercials is roughly 4:6.
- Popular programs include news, weather reports, and cartoon films.
- A focus is on differentiation from mass media.
- Rolls are organized in view of average boarding hours.
- In constructing short programs, attention is given to visibility and the lack of sound.

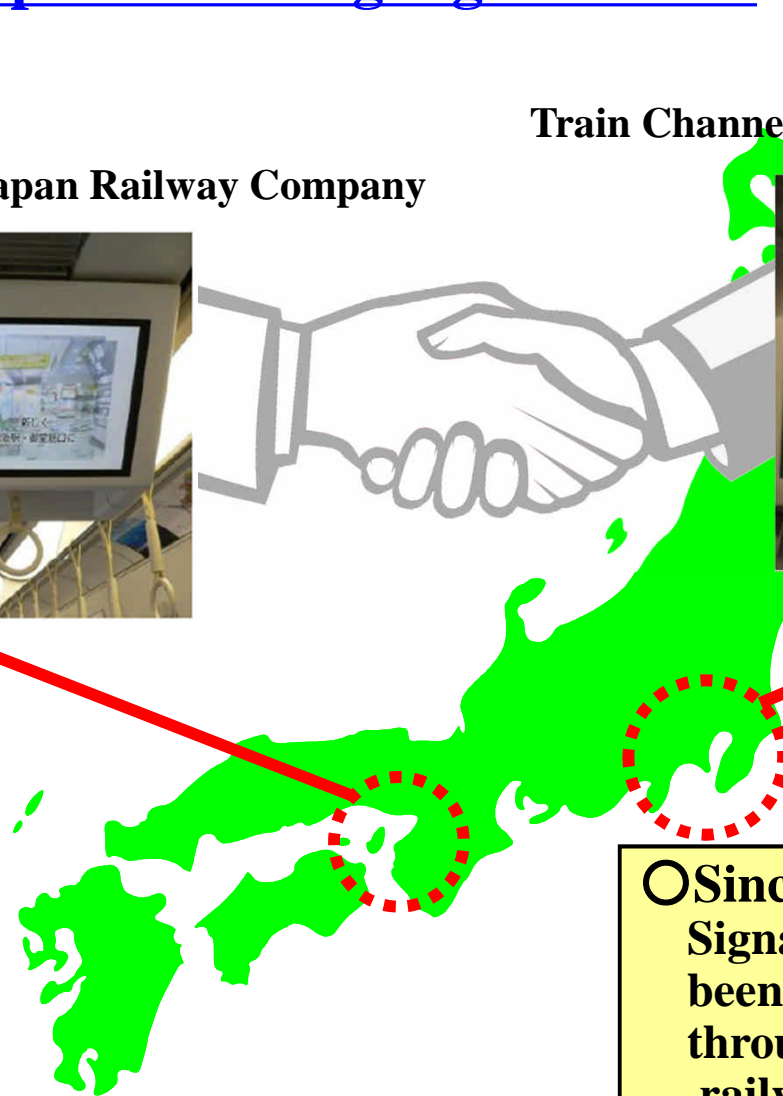
# Examples of Digital Signage Deployments

## Network expansion of signage in trains

West Vision by West Japan Railway Company



Train Channels by East Japan Railway Company

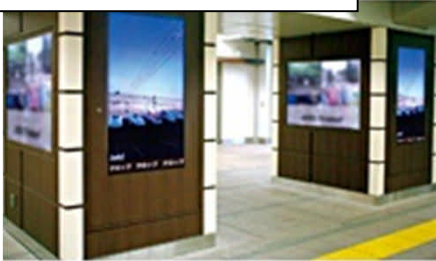


○ Since July 2009:  
Signage in Tokyo and Osaka has been connected to form a network through coordination among railway signage operators.

# Examples of Digital Signage Deployments

## Signage inside stations: J AD Vision

65-inch screens at Gotanda Station (2 units)



65-inch screens at Akihabara Station Denki-Gai Exit (8 units)



65-inch screens at Akihabara Station Central Exit (7 units)



\*Inclusive of 16 units at Sendai Station.

65-inch screens at the Tokyo Station Central Passage (11 units)



65-inch screens at the Tokyo Station Keiyo Passage (10 units)

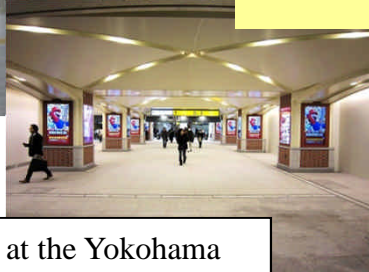


52-inch screens at Yokohama Station Central Passage (5 units)



**225 Screens at 16 Stations in Tokyo Metropolitan Area**  
**264 Screens at 31 Stations in Eastern Japan Area**

65-inch screens at the Yokohama Station South Exit (16 units)



65-inch screens at Shimbashi Station (10 units)



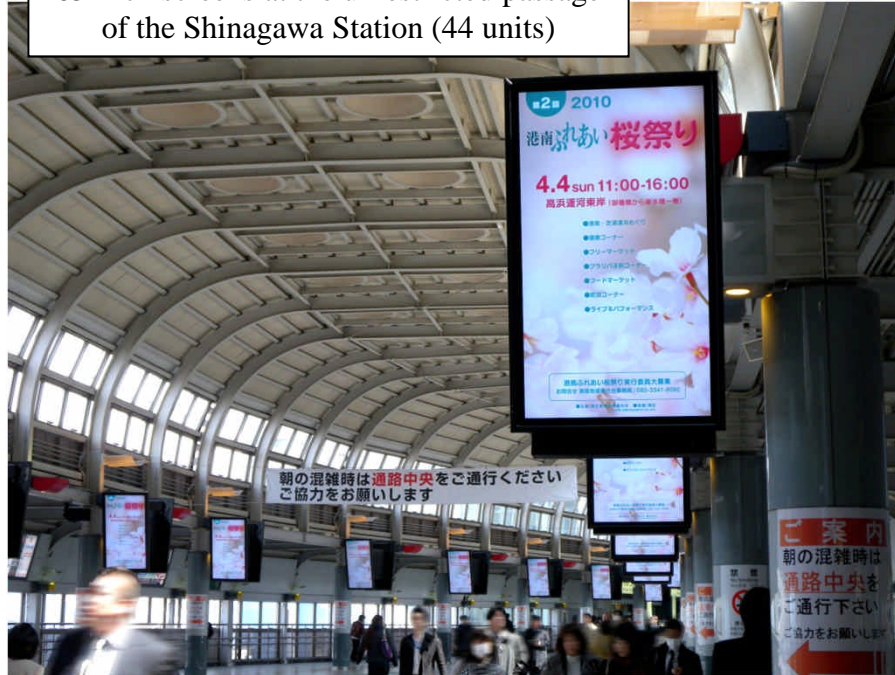
65-inch screens at Shibuya Station (8 units)



- Some screens have been installed vertically to directly confront the flow of customers.
- Screens support video and still images, and clock synchronization (no sound).

# Examples of Digital Signage Deployments

65-inch screens at the unrestricted passage of the Shinagawa Station (44 units)



ニュース: 経済・IT

金融・財政 産業・ビジネス IT 写真

この記事でブログを書く 引用プログラム メール メッセ 印刷

## 44面の大型液晶ディスプレイ JR品川駅に国内最大規模の広告

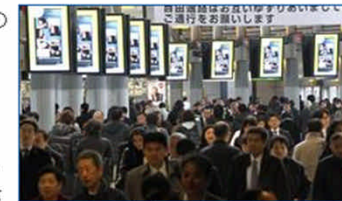
2010.3.29 14:51

このニュースのトピックス: 外食

JR東日本は29日、東京・品川駅中央通路に44面の大型液晶ディスプレイを配置した広告の展開を始めた。駅ナカのデジタル広告としては国内最大規模という。

ディスプレイの大きさは65インチで、この日は6社の広告が放映された。動画放映などによって表現力の高い広告宣伝が可能で、同社の広告関連会社、ジェイアール東日本企画では「朝に野菜ジュースの宣伝を出したり、夜に居酒屋の広告を出すなど時間に応じて放映する広告を切り替えられるため、効果的なPRができる」としている。

JR東日本では、デジタル広告に力を入れており、現在12駅18カ所に170面を展開。来年度も100面程度の設置を検討している。



JR品川駅の自由通路に44面の液晶ディスプレイ広告媒体「デジタルポスター」=29日午後、東京・JR品川駅(古厩正樹撮影)

このニュースの写真



2010.3.29 Sankei News

## デジタルポスター、切り替え瞬時に JR品川駅に登場

2010年3月29日

印刷



品川駅の自由通路に設置されたデジタルポスター=29日午前11時、東京都港区、福岡亜純撮影

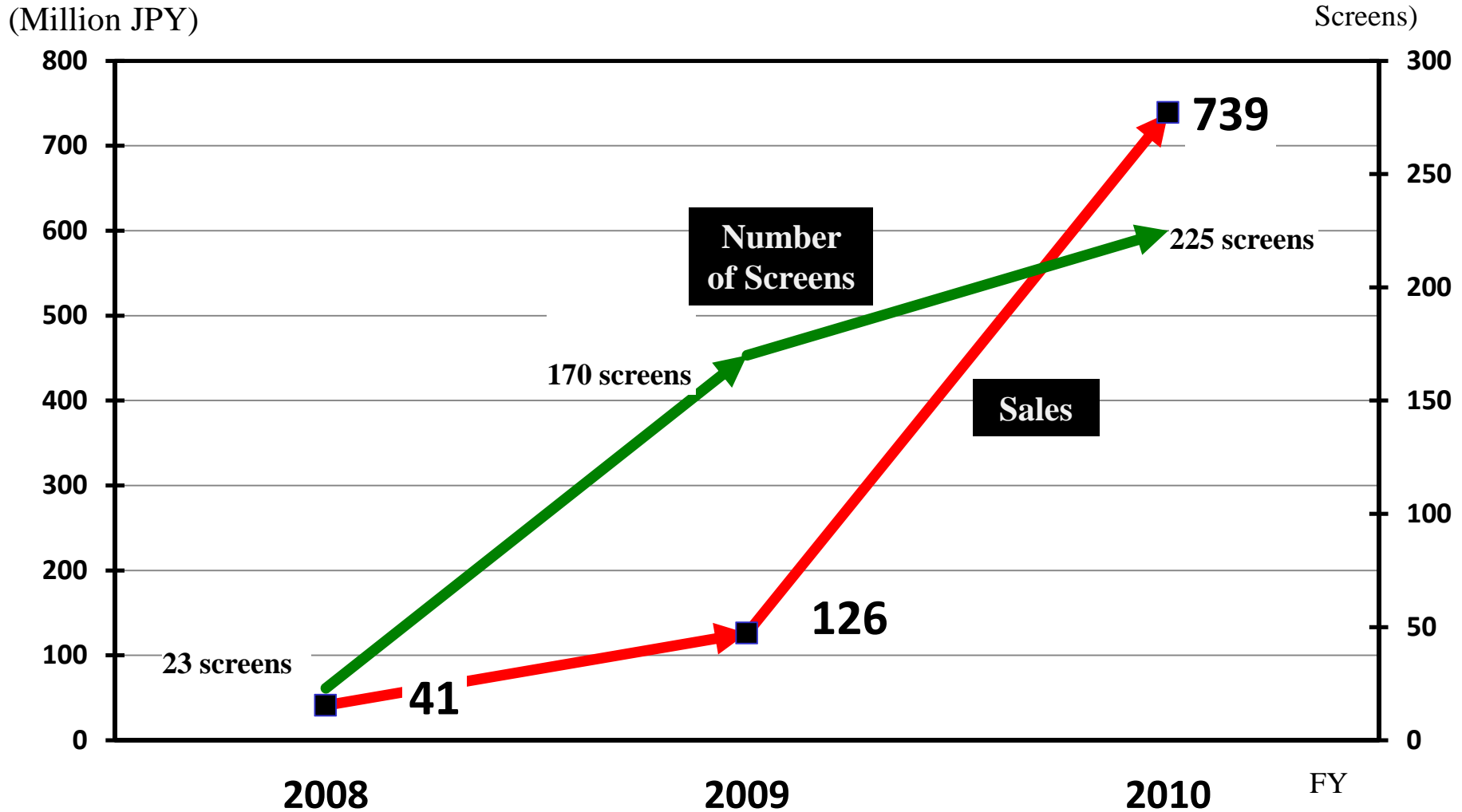
東京都港区のJR品川駅の自由通路に液晶画面で広告を映す「デジタルポスター」44枚が設置され、29日午前の式典後、表示が始まった。アーチ状の(まりが)連なる通路両側の柱の表裏に65インチの大型画面を掲示する。高速無線通信「WIMAX(ワイマックス)」を利用して時間帯や曜日に応じてリアルタイムに内容を切り替えることが可能という。

2010.3.29 asahi.com

# Examples of Digital Signage Deployments

## J AD Vision: Trends in sales and number of screens

(Limited to the Tokyo Metropolitan Area)



# Examples of Digital Signage Deployments

## Network expansion of signage inside Stations

○From February 2012:  
Signage in Tokyo, Nagoya, and Osaka will be connected to form a network through coordination among railway signage operators.  
=> 227 screens in 18 stations



J AD Vision WEST

West Japan Railway Company  
: 55 screens at four stations

J AD Vision

East Japan Railway Company  
: 136 screens at 13 stations

J AD Vision Central

Central Japan Railway Company  
: 36 screens at two stations



# Examples of Digital Signage Deployments

## Demonstration experiment for Eki Digital Signage Network



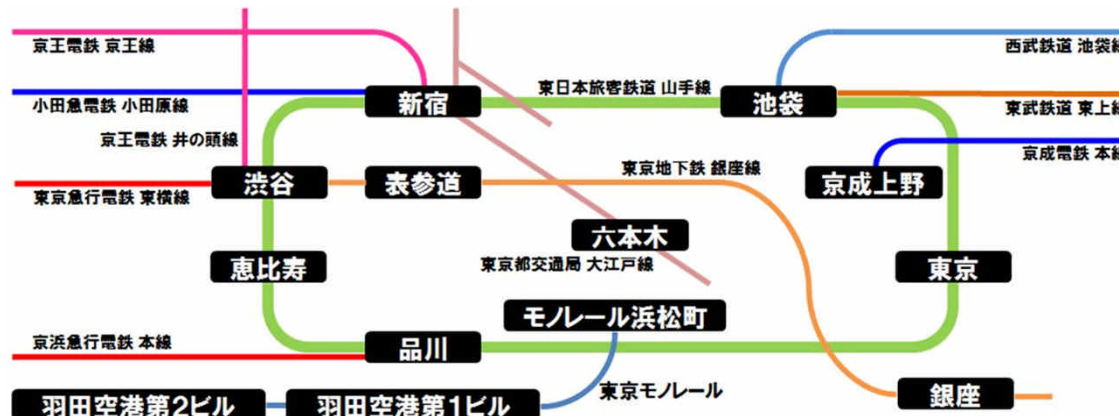
### Joint demonstration experiment for digital signage inside major stations in the Tokyo Metropolitan Area

- **Term:** June 21, 2010 through the end of March 2012
- **Main Entity:** Digital Signage Promotion Project (consisting of the following 11 companies listed in the Japanese alphabetical order)

Odakyu Agency Inc.; Keio Agency Inc.; Keikyu Ad Enterprise Co., Ltd.; Keisei Agency Co., Ltd.; jeki; Seibu Railway Co., Ltd.; Tokyu Agency Inc.; Bureau of Transportation of the Tokyo Metropolitan Government; Tobu Railway Co., Ltd.; Metro Ad Agency Co., Ltd.; and Monorail Agency Co., Ltd.

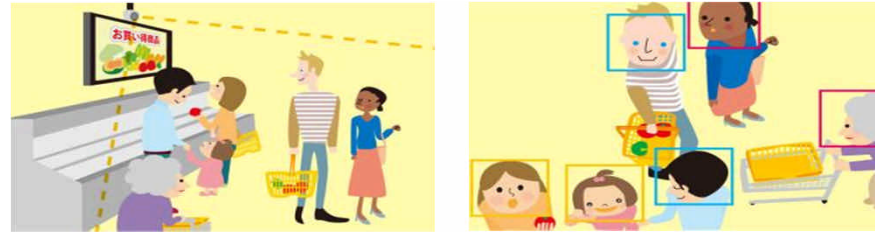
- **Locations for Installation:** 27 screens in 20 stations of 11 railways (52-inch, horizontal screens in principle)

\*All sites are equipped with a facial recognition system to verify different indicators of effectiveness.



# Examples of Digital Signage Deployments

## Mechanism of the Facial Recognition System



Specifications of the facial recognition system

- Measurement range: Within approximately five meters in front of the unit
- View angle: Approximately 60 degrees

Number of viewers

Number of people passing in front of the screen

**Detect** Automatically detects **human faces** based on the images captured by the camera.

**Determine** Determines gender and age groups based on the facial images detected.

**Record** Records only numerical data after estimating gender and age groups.

**Detect** Automatically detects **the flow and move of people** based on the images captured by the camera.

**Record** Records only numerical data.



## ■ Establish a position as transit media

- **Networking: Standardization of specifications**
- **Focus on contents and methods of expression: Differentiation from mass media**
- **Establishment of measurement methods for media value: Use of audience tracking data**
- **Introduction of new technologies: 3D, OLED, full-segment ground digital broadcasting service (concurrent use of 12 segments and one segment), etc.**
- **Need to provide information: Examination of the possibility of providing information in a disaster**

## ■ Effective Use of Energy and Resources

- **Conservation of energy by using LEDs as the backlight for displays**
- **Examination of the possibility of recycling materials**
- **Creation of energy using solar power generation and other technologies**

## ■ Low-cost Operation

- **Creation of a short-term recovery business model through cost reduction (both initial and running costs)**
- **Centralized management of maintenance and delivery operations, integrated management of servers, systemization of work flow, etc.**