

Increased Productivity with Interactivity



INSIDE: How retailers and others can engage customers with greater efficiency and profitability using interactive digital signage.

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SIMPLIFYING DIGITAL MEDIA MANAGEMENT™

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About the sponsors

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ADFLOW Networks is the leading provider of digital media-management technology that delivers dynamic marketing messages to digital and interactive displays with an innovative single Web-based application. Its customers enjoy the lowest total cost of ownership while revolutionizing their audiences' point-of-contact experience. ADFLOW makes it simple to completely control the customer experience from on central control panel.

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Introduction

As interactive digital signage and kiosks have become more commonplace, their effectiveness as marketing tools also has become more evident. Three examples of these technologies are highlighted in this guide — networked interactive kiosks; mobile-driven digital signage, which allows users to interact with ads, games and other content on digital signs via mobile phones; and gestural digital signage, which allows users to interact with content on digital signs through hand gestures and other body movements.

The prominence of the digital out-of-home market and the cost-efficiency of new interactive systems has increased the availability of more diverse and dynamic interactive marketing experiences in public places. These new technologies now appear in a variety of venues, including shopping malls, retail outlets, movie theaters, amusement parks, expositions and fairs.

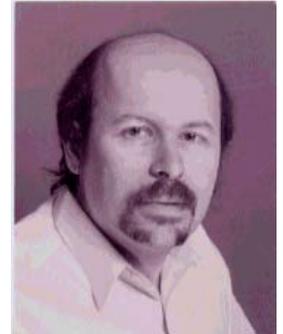
Mobile-driven and gestural digital signage, in particular, have gained popularity as users have grown more comfortable with mobile entertainment and gestural interaction in their homes through video games, for example. These new forms of interactivity fit in well with the trend toward more experiential and immersive marketing.

Another factor in the growing popularity of interactive digital signage and kiosks is that they create opportunities for users to become more personally involved and interact with content that is meaningful to them. The technology draws users in and immerses them, resulting in greater consumer engagement with brands and other material.

Studies have shown that because of their greater involvement with content, users retain more brand and product information when it comes from interactive technology. Multidimensional, dynamic media engage and reward users much more than one-dimensional, static media.

Best of all, deployers of interactive digital signage can gather and analyze information on the interactions between users and the technology. As a result, these innovative digital signs and kiosks create an entirely new context for marketing and training.

We would like to thank ADFLOW Networks, whose sponsorship of this guide enables us to bring it to you at no cost.



By Michael Mascioni
Contributing writer,
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Chapter 1 Sales and marketing applications

Interactive kiosks have clearly demonstrated their effectiveness as sales tools, according to Steve Kartonchik, executive vice president of sales and marketing for ADFLOW Networks, a provider of Web-hosted digital signage and interactive kiosks. According to Kartonchik, interactive kiosks have a positive impact in the retail space because they allow retailers to accomplish more with a smaller staff, and they generate a measurable sales lift.

The cost efficiency of interactive kiosks is particularly appealing during an economic downturn, because the machines have a capacity for “driving multiple sales cycles at the same time,” Kartonchik said.

To illustrate this capacity in the retail environment, Kartonchik cited the case of kodo Mobile, which operates a network of large kiosks featuring four interactive screens that is staffed by two people. Without such a kiosk, the company would need 10 salespeople per location to achieve the same results, he said, noting that kodo Mobile realized sales numbers far in excess of its expectations by employing the kiosks. Virgin Mobile also had success with the interactive kiosks it installed recently.

Kartonchik believes interactive kiosks are particularly useful for marketing high-end sports gear, such as golf

equipment and skis, and “high-tech, high-touch products,” such as digital cameras — which often are sold in understaffed departments in megastores and office-supply stores.

He also highlighted the power of interactive kiosks and digital signage as sales-training tools. For example, OfficeMax discovered that sales staff members were viewing ADFLOW-driven in-store screens to improve their product knowledge. The retailer now provides informational content about their products for staff after store hours.



Interactive kiosks are particularly effective in educating sales staff about new products specifically. In fact, the use of ADFLOW’s kiosks as sales-training aids has proven to be an unexpected bonus for clients. As a result, ADFLOW is now promoting the added value and benefits of using kiosks for training new employees.

Canadian mobile-service provider kodo Mobile realized sales numbers far in excess of its expectations by employing a network of interactive kiosks.

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The technology also addresses the challenge of keeping product information current, Kartonchik said, by allowing retailers to deliver consistent sales and marketing messages across all locations and localized messages tailored to particular locations and audiences. ADFLOW software can easily adapt and manage those

messages, leading to productivity gains for retailers, he added.

According to Brian Ardinger, chief marketing officer for customer-experience technology provider Nanonation, a key benefit of these forms of marketing-oriented interactive technology is that they offer consumers

Case study: kodo Mobile

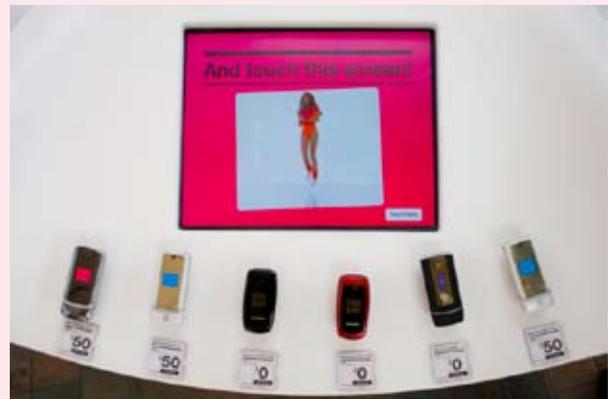
Canadian mobile-service provider kodo Mobile has leveraged the benefits of ADFLOW Networks' interactive kiosk software to create a more satisfying and personalized shopping experience at its retail locations, which appeal specifically to young consumers.

The company utilizes ADFLOW's Dynamic Messaging System, or DMS, with interactive touchscreens, a content-triggering system and LED readerboard integration, within a newly designed sales kiosk. The kiosk incorporates four customer self-service stations. Customers select a mobile device or service and use the touchscreen to access information about the features, plans and promotions specific to that device or service.

Once a customer makes a selection, an on-site sales representative assists in completing the sales transaction. Interactive content on the kiosks is centrally updated and broadcast remotely to all kodo Mobile kiosks across Canada via ADFLOW's DMS software. These features allow kodo Mobile to quickly react to market changes in rate plans and pricing

models and provide their customers with the latest mobile products and services.

According to Kartonchik, the company has seen additional benefits: Sales representatives enjoy the interactive feature and have incorporated it into their selling approach, thereby delivering the kodo Mobile sales message more effectively, and customers are now educating themselves on products and services and don't feel as if they're being handled. The net result for kodo Mobile is a significant return that exceeded their forecasts.



Kodo Mobile's interactive kiosks utilize ADFLOW's content-triggering system to inform customers and drive sales.

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control and create customer-driven marketing experiences by enabling shoppers to find the information they want when they want it. In that sense, the technology provides personalized marketing and transforms the selling process into a relationship-building process, he said, adding that another advantage is the increased measurability over traditional signage and kiosks or other traditional marketing methods.

Ardinger said the three factors driving interest in the technology are:

- The decreasing cost of interactive kiosks and signage,
- The improved functionality and measurability of marketing-oriented kiosks and
- A changing audience that demands instant access to information using digital technology

Interactive kiosks allow companies to achieve better bottom-line results with fewer employees while at the same time providing product information to customers more efficiently. In essence, they create different customer experiences from those provided by traditional marketing.

According to David Roscoe, founder and CEO of ADFLOW Networks, the objectives of the retailer, the kiosk's target audience and the products promoted by the kiosk dictate the

content strategies for the kiosks' marketing and sales applications. With that in mind, ADFLOW designs kiosk tools tailored to specific audiences.

That means the company needs to know its market.

“For audiences that might be intimidated by technology — typically older audiences — it's important to offer short content on large screens using large buttons with a user experience that is intuitive and guides the customer through,” Roscoe said. “Reaching tech-savvy audiences requires quick and engaging material, which takes into

“Reaching tech-savvy audiences requires quick and engaging content, which takes into account that this target audience wants their information now.”

— David Roscoe, founder and CEO, ADFLOW Networks

account that this target audience wants their information now.”

The key element in content strategy is engaging the consumer, which requires combining many different audiovisual elements to deliver a satisfying customer experience, Roscoe explained. To be effective, content must be current, easy to change and relevant to the customer. This is particularly important when developing material to market complex products, such as

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phones with a multitude of features and prices that change frequently.

“Centrally managed kiosks address this marketing challenge by affording the retailer the ability to manage the content centrally to maintain product compliance and integrity across their retail stores,” Roscoe said. “Interactive kiosks that are part of a network offer the added benefit of monitoring uptime on a 24/7 basis. In addition, data on each and every customer interaction can be collected, reported on and analyzed. This data will prove vital to ensuring the kiosk experience is engaging the customer in a manner consistent with the retailer’s objectives. Sales associates can use kiosks as a tool to help the customer understand the complexity of the product offered.”

Marketing-oriented applications of interactive kiosks must address key consumer requirements, which revolve around the consumer’s need to access product information easily, efficiently and quickly, Ardinger said.

With that in mind, Nanonation has designed tools to evaluate the way consumers interact with their content. “The more touches our kiosks generate, the better we understand customer behavior,” Ardinger said. As a result, the company can modify content according to user input.

One of the most important design elements for marketing-oriented



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interactive kiosks is properly representing the brand in the kiosk’s design, Ardinger said. He believes it’s essential that the kiosk’s interface highlight and enhance the brand image of the company’s kiosk and warns that interactive content that is essentially a “Web site on a stick” will fail, because the in-store interaction experience is significantly different from the in-home experience.

Francie Mendelsohn, president of Summit Research Associates, said kiosk vendors often expect too much from users and fail to take their short attention spans into account. If users aren’t able to quickly learn how to use kiosks, they will walk away. A simple solution like having a progress bar on the screen makes the kiosk more user-friendly. And using games in a variety of marketing and sales applications can be an effective way of attracting certain target audiences to them and

When kiosks and digital signage are integrated, data on each and every customer interaction can be collected, reported on and analyzed.

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encouraging customers to familiarize themselves with the kiosk's function, Roscoe pointed out.

In grocery stores, kiosks can endorse and print in-store coupons and promotions, adding value to the customer experiences. ADFLOW has implemented one such solution for a large grocery store chain.

Kartonchik feels mobile interactive kiosks have promise and said ADFLOW is working on integrating mobile communication into their kiosk application

Another type of interactive technology that is starting to impact the kiosk and interactive digital signage markets is "augmented reality," which essentially merges the real world with virtual images or objects. This technology can be harnessed to create striking product images that can be held in the palm of one's hand or viewed in a special mirror, for example.

Total Immersion, a provider of augmented reality, has developed a number of these types of applications for digital out-of-home marketing campaigns, including kiosk displays. These applications typically allow users to play with and sample products presented in virtual product brochures and boxes.

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Advancements in the mobile device and digital signage industries, coupled with growing consumer acceptance of mobile marketing, are opening up new opportunities for the integration of the two technologies. In essence, mobile-driven digital signage exploits activities consumers already enjoy. It adds new dynamics, expands the scope of interactive marketing and offers more spontaneous and direct interaction with digital signage. And it offers a higher level of interactivity in public places that hasn't existed before, said Jeremy Lockhorn, director of emerging media and video innovation at Razorfish.

Some in the industry believe mobile devices will play a leading role in digital signage. In fact, Lockhorn calls mobile phones crucial to the success of digital signage, especially since mobile devices are becoming the "ultimate universal remote control" for consumers.

H. Jay Patel, president of BlueFire Digital, believes the value of mobile interactivity to the digital signage market lies in the shift from one-to-many communication to one-to-one communication. A primary benefit of mobile-driven digital signage is that it offers more opportunities for user-generated content. This is key, since user-generated content delivered over digital signage can enhance branding efforts, Patel said.



Mobile communications also help expand the audience for digital signage, leveraging the popularity of mobile phones. And mobile devices afford an ease of use in public places beyond what is typically possible with other technologies, such as laptop computers. Mobile-driven digital signage exploits the mobile device's ease of use and flexibility, eliminating the need for users to learn a new device, Patel said, adding that mobile

Mobile-driven digital signage is attractive to retailers because of its ease-of-use, flexibility and immediacy to the average consumer.

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doesn't force users to interact at arm's length the way kiosks do. Essentially, mobile interaction with digital signage affords a more natural and dynamic form of interactivity because it uses a device that's familiar to consumers.

Another benefit of mobile-driven digital signage is its ability to effectively target audiences, thus providing greater accountability. The innovation allows advertisers to reach specific audiences at a lower cost and in a more timely fashion, Lockhorn said. He believes digital signage applications driven by mobile interaction are more valuable from an ROI perspective, because they have been shown to increase brand awareness significantly.

Other advantages of mobile-driven digital signage are the immediacy of mobile phones in public places and the average consumer's willingness to employ those phones in a time-sensitive manner, according to Dean Macri, CEO of Cielo Mobile, who describes the mobile phone as the ultimate direct-response mechanism for the digital out-of-home market. As he explains, short code keywords can be displayed on ads on digital signage to connect digital signs with interactive calls to action.

For example, a digital out-of-home sign might display an ad for a retailer, such as JCPenney. The ad sends product ideas to the user's mobile phone, and the user is then encouraged to

text message the keyword "gift" to a particular short code. That short code could contain the gift idea, promotional information for the gift and a link to JCPenney's mobile site, for instance.

Some mobile-driven digital signage campaigns have been integrated into broader mobile-marketing campaigns. For example, BMW has implemented text messaging in its airport campaigns, allowing travelers to connect with the automaker's mobile site using keywords. Each campaign offers access to videos of a particular BMW car (or a photo gallery, if phones lack video support). The site also provides dealer look-up and a click-to-call button to directly connect with a dealer for more information. BMW obtains reports on the efficacy of signs at particular airports and measures the lift that mobile provides in increased test-drive appointments and sales.

Mobile devices also build bridges to other media, Lockhorn pointed out. Such companies as LocaModa are dedicated to exploiting this convergence. From LocaModa's perspective, combining mobile, online and out-of-home elements is the only way of presenting a truly interactive marketing campaign in public places, Steve King, the company's vice president of sales, said. Mobile devices allow digital signage to extend and expand its audience beyond public places and link users in the home market with those in public places.

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Mobile-driven digital signage is a small but growing market. According to a 2008 report by Multimedia Intelligence, 169,000 newly installed digital screens were outfitted with Bluetooth, RFID, Wi-Fi or SMS capability; Rick Sizemore, chief strategy officer at Multimedia Intelligence, pointed out that RFID applications for digital signage and self-service kiosks have been in place for years. According to Keith Kelsen, executive chairman of The Media Tile Company, Bluetooth and text message integration with digital signage passed through an experimental phase in 2008.

Mobile-driven digital signage campaigns already are delivering strong marketing results.

MegaPhone developed an interactive mobile campaign for Adidas at the 2008 NBA All-Star Game that proved to be highly successful, according to Dan Albritton, CEO of MegaPhone. The game-oriented campaign utilized a branded van outfitted with a 10-foot screen and parked near the site of the game that was designed to add names to the Adidas mailing list.

As part of that campaign, users received SMS messages regarding special events and promotions at Adidas stores and were directed to the nearest Adidas outlets. The campaign generated three times as many sign-ups for the Adidas mailing list as the list generated by the NBA's text-messaging

campaign at the game, Albritton said.

In addition, users participating in that campaign opted out at a much lower rate. The campaign provided a compelling interactive experience for users and yielded a greater response rate at a lower cost for Adidas, according to Albritton.

One of the most successful examples of interactive mobile marketing in public places is the Vodafone Cube, a 4- by 4-meter cube developed by YDreams at Vodafone's Lisbon headquarters. The Cube, which is aimed at Vodafone visitors and employees, allows cell phone users to interact and play with videos, multiplayer games, product demonstrations and other content displayed on its large screen, according to Marta Vieira, director of business development and operations. To accomplish this, users call a number displayed on the screen that routes the call through a digital audio switchboard to a server. Once connected, users join a real-time game with up to four participants. Typically, hundreds of people a day interact with the games and content shown on the Cube, according to YDreams.

Social networking and user-generated content also have helped to significantly expand the audience for mobile-driven digital signage systems, generate increased user involvement and achieve greater marketing impact. Social networking through mobile

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signage combined with Internet service has opened up new opportunities for marketers by linking users in the out-of-home and in-home markets. The fusion of out-of-home networks and online social networks is particularly powerful, King said, because it helps extend the reach of brands and advertisers while offering consumers the benefit of connecting seamlessly with their peers, despite whether they're located at the same venue.

LocaModa's social networking feature extends the reach of the initial out-of-home campaign to the Web, delivering more overall impressions than out-of-home could deliver on a standalone basis, according to King. LocaModa calculates that a generic text-message campaign in a digital signage network of 1,000 bars would generate 60,750 messages per month, while a localized text-message campaign connected to a social network would yield 431,000 messages per month (according to a set of assumptions outlined in a white paper the company released in 2008).

Combining a standard text-messaging campaign with social networking dramatically increases the response rate, according to LocaModa. For example, combining a generic text message campaign with a social network can increase its effectiveness from 1.35 percent to 3.41 percent, and a localized text-message campaign can increase the effective response

ratio to 3.75 percent. When this kind of localized campaign is combined with social networks, the effective response rate can be increased to 3.75 percent.

At the same time, mobile-driven digital signage needs to be properly applied to be truly effective, Lockhorn pointed out, because it is better suited to smaller, targeted audiences than to a mass audience. He cautioned that mobile-driven digital signage is at a nascent stage and has significant drawbacks, including phones' lack of standardization and limited audience reach. He further warned of the danger that mobile devices and digital signage will overload consumers with more ad clutter in public places the way other

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new technologies do.

Another stumbling block to mobile-driven digital signage has been the lack of technology that properly integrates mobile devices with digital signage, Patel said. To fill that gap, BlueFire Digital has developed an array of

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products, including the BlueFire uTV system (which fuses Bluetooth, SMS and digital signage and allows the delivery of social media and user-generated content for digital signage) and the BlueFire MS SE system (which brings mobile advertising capabilities to the digital signage and kiosk markets).

Lockhorn advises advertisers to assess whether mobile-driven digital signage marketing campaigns fit their objectives before embarking on those campaigns. Mobile-driven digital signage marketing applications are “currently limited in their reach, requiring the marketer to balance scale versus impact,” he said. “But as technology standards begin to emerge in mobile-activated digital signage, that scale will come. Those marketers who experiment today will be in a stronger position once that scale is achieved.”

In addition, he feels the effectiveness of an interactive technology like mobile in public settings also depends on the environment in which it’s applied; an interactive application that works well in an airport might not be suitable for a coffee shop.

In order to be viable, mobile-driven signage must be implemented and managed properly, according to Rick Sizemore, who said advertisers and marketers should adopt easy and intuitive opt-in and opt-out capabilities for mobile-driven digital signage campaigns. And they must be sensitive

to user needs; once a user has purchased a product from a particular vendor, a feedback loop should be triggered that sets an appropriate time frame for contacting the customer again.

If a customer opts in for an auto marketing offer and then buys a car, the customer should be able to opt out to avoid receiving further unwanted marketing messages. For other products, a one-year waiting period should be instituted before the vendor communicates with that user again once a purchase has been made, Sizemore said.

In addition, given the time-sensitive nature of consumer visits in public places, mobile interactive marketing and game experiences must be short, or they risk turning consumers off. “Very simple games with clear instructions and a user-friendly interface” tend to perform best in public places, according to Jayne Karolow, director of community at LocaModa. “Users in the out-of-home environment must be able to enter a game at any time and immediately understand how it works.” Otherwise, she said, they’ll simply move on.

Although there are some pilot programs and considerable experimentation in mobile-driven digital signage, that signage isn’t yet ubiquitous, especially since many people aren’t accustomed to using the mobile platform in digital signage settings, according to Brian

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Ardinger, chief marketing officer for Nanonation. He believes the mobile-driven digital signage market will experience greater growth as mobile phone use grows and as the capability of smart phones increases.

Chapter 3

Gestural digital signage

Gestural interactivity allows for more natural and direct interaction with content, including games and marketing-oriented material, without the encumbrances of traditional input devices. As such, it provides more immersive interactivity, which is more impactful and dynamic from a marketing and productivity perspective.

Users have shown a natural inclination to interact with content through gestural movements and have found it enjoyable, especially because they are able to control the experience. As a result of this willing participation, they are more receptive to marketing messages.

The development of new user interfaces, such as interactive furniture and lighting systems, has significantly increased the power of gestural interactive devices and expanded the scope of gestural interactive experiences. Gestural interaction in public places also is a logical outgrowth of such experiences in the home market, as evidenced by the popularity of Nintendo's Wii game system.

Lower costs for screen systems have made gestural systems more cost-effective. In addition, advancements in camera technologies and hand- and full-body tracking software have made certain gestural systems more powerful.

According to Antonio Camara, CEO of YDreams, studies conducted by his company and others have shown that gestural signage is beneficial for brands in terms of customer retention and brand enhancement. Gestural signage elicits direct user feedback, bringing greater attention to brands. Another advantage of gestural signage is the ease of the user interfaces employed. Gestural signage, which is targeted primarily at young consumers, also has gained momentum because applications are faster and cheaper to develop.



Games, which have been a central element in YDreams' gestural signage, are particularly suitable for a wide audience of casual users, who find them easy to learn, Camara said. He says gestural signage already has demonstrated its appeal in retail settings, movie theaters, stadiums and arenas.

A number of studies have shown that gestural digital interactive marketing systems have significantly enhanced brand awareness and, in some cases, results in increased product sales.

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A number of studies have shown that gestural interactive marketing systems have significantly enhanced brand awareness and in some cases resulted in increased product sales. YDreams succeeded in generating greater brand awareness and product sales in various promotional projects it mounted using its gestural signage applications.

The company developed a point-of-sale promotion for Compal at the World of Flavors fair at seven Continente supermarkets in Portugal in 2007, according to Marta Vieira, director of business development and operations for YDreams. The promotion centered on a game on a large plasma screen displaying a fruit orchard that allowed users to play and win prizes by purchasing four or more Compal products.

Users could pick fruit from the trees by clapping in front of the screen, with the goal being to pick as many pieces of fruit as possible. The promotion, called Compal YSenses Interactive, produced a strong response, generating an average of 400 interactions per day. Customers who played the game were 40.3 percent more likely to purchase the brand's products, according to the company.

Through interactive MUPI installations, YDreams implemented a gestural signage campaign for Nokia at Lisbon Airport that also had a strong marketing

impact: 88 percent of users interviewed for the campaign recalled the Nokia brand, 81 percent understood the Nokia product's main feature and 60 percent wanted to know more about the product. The campaign also ran at other airports.

YDreams created new marketing opportunities for Barclays with an interactive carpet gestural campaign it devised for the company at Lisbon Airport; 51 percent of users interviewed for the campaign recalled the Barclays brand, and 18.7 percent wanted to know more about Barclays' services.

YDreams also created an interactive cinema campaign for Coke called Happiness Factory using gesture-based interaction that generated strong results. The campaign centered on a game designed to enable users to interact more with the Coke brand that allowed them to control the main character's movements by waving their arms.

In the game, the Worker character runs left and right in an effort to catch as many Coke bottles as possible. An emcee preps the audience for the surprise and mimics the Worker during the game. Research results underscored the campaign's substantial brand impact; 40 percent of the respondents reported increased brand awareness of Coke compared with that of traditional in-cinema advertising.

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YDreams also drove greater brand awareness for Vodafone products through an interactive game it presented in +Cinema theaters in the greater Lisbon area to promote Vodafone's Duplex ADSL brand last April. The game, which was developed with the agency Brandia Central, allowed users to control the movements of the main character (VodaRed Man) by waving their arms in the air. An emcee prepped the audience and encouraged participation in the game. Surveys indicated that the moviegoers who played the Vodafone game were more inclined to purchase the brand's products. The surveys also found that brand recall and awareness of those products was higher than that generated by traditional cinema advertising.

In 2007 YDreams stirred up interest in Dove soap products through an interactive promotion at Sao Paulo movie theaters that was based on gestural interaction. In that promotion, moviegoers had an opportunity to play with soap bubbles that appeared to descend on movie screens. Webcams were installed at the back of the theaters to track the movements of the people who interacted with the bubbles by pushing and breaking the bubbles on the screen through their gestures.

According to Vincent John Vincent, president of GestureTek, gestural signage mimicking touchscreens

affords two key advantages: They offer more dynamic, engaging and exciting experiences that capture the user's attention, and they harness flexible technology that can be applied to different sizes of surfaces, including windows and screens.

Another class of gestural systems essentially fuses kiosks and billboards, leveraging unconventional surfaces such as airport walls and store floors, Vincent said. These systems have special advantages in marketing applications because they offer a dynamic form of interactivity and capture user attention, resulting in a significant increase in brand retention, as evidenced by a study Arbitron did for Reactrix.

Retailers can achieve greater operational efficiencies with gestural signage technology and other interactive virtual product displays, according to Vincent. These displays can replace or supplement printed marketing and promotional material, as well as traditional advertising signage. They also can help retailers keep inventory costs under control, since interactive product demonstrations allow customers to gain a good idea of a product's functionality and appearance even if the product isn't in stock, he said.

In addition, the ability of gestural displays and other interactive digital

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displays to attract eyeballs and provide personalized information in order to market and sell products 24/7 is a major asset, according to Vincent, who added that customers tend to interact for longer periods of time with this kind of technology.

An added asset of gestural systems is their ability to measure audience behavior, including the audience's reaction to ads, because the cameras used with those systems are focused on users throughout their operation.

Vincent said the gestural signage market has enjoyed good, steady growth, with opportunities for gestural signage using large displays growing as the cost of various technologies and displays decreases.

GestureTek's gestural interactive systems also have had a significant impact in a range of marketing campaigns in public places. The company had success with a system it installed in the flagship store of Hudson Bay in Toronto with multisports windows, Vincent said. The system, which was situated at the corner of a window in that store, utilized 8- by 12-foot projectors, and featured special effects and ads for Hudson Bay.

GestureTek also reported growing demand for its systems in retail digital signage applications over the past few years, as shopping malls and other retail outlets sought new ways

of making shopping a destination experience and one that is more enjoyable. The majority of malls installing GestureTek's systems are now using it for digital signage applications, Vincent said.

Most of the GestureTek installations in shopping malls and retail outlets provide entertainment, though they also promote brands by bearing their logos.

An added asset of gestural systems is their ability to measure audience behavior, including the audience's reaction to ads, because the cameras used with those systems are focused on users throughout their operation.

GestureTek's ScreenFX system was an integral part of the launch of the Charlestown Mall in Ireland. Its interactive display systems can project visual content onto any surface, including floors, walls, tables, countertops and bars. Users control multimedia content and special effects by moving their hands and bodies. GestureFX utilizes GestureTek's patented video gesture-control software and special camera technology.

The system, which was installed in a high-traffic location inside the Charlestown Mall, was integrated into a 103-inch plasma display, allowing

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users to interact with the display. GestureTek's GroundFX interactive floor displays also were installed at several entrances in the mall. Feedback indicates that users enjoy the experience, Vincent said.

In addition, Target Stores has used GestureTek's system in interactive billboards in an underground mall in Canada. That system has proven to have a positive effect on store traffic, according to Vincent.

Some retail applications of GestureTek's systems are designed to promote specific products from particular companies. For example, Telefonica, a Spanish telecommunications company and part investor in GestureTek, is using GestureTek's multitouch system to provide more information about its products and brand in its stores. This application, framed around the Telefonica Retail Window, offers users an opportunity to collaborate with others while interacting with content on the screen.

Brand Experience Lab also has created new opportunities for raising brand awareness through a social interactive game system for movie theaters called AudienceGames, which is driven by the collective movement of theater audiences, who control game elements on the screen. The system is designed to foster socialization among those in the audience by using a proprietary

vision-based technology of Audience Entertainment.

The company harnessed the system initially in custom games it developed for MSNBC.com in the U.S. and for Volvo in the U.K. last year. It developed an in-theater game called NewsBreaker for MSNBC.com and also conceived a game in theaters for the Volvo XC7 that preceded showings of the movie "Ratatouille." The game generated 33,000,000 media impressions from one showing, according to Brand Experience Lab.

Surveys conducted with users interacting with the AudienceGames sponsored by MSNBC.com and Volvo also highlighted high user engagement with the games; 78 percent of the respondents played the NewsBreaker game, and 84 percent of those surveyed played the game sponsored by Volvo.

The benefits of the game for MSNBC.com were highlighted in the finding that 71 percent of those surveyed reported recalling MSNBC.com as the sponsor. In addition, 75 percent of those surveyed indicated a greater likelihood of using MSNBC.com.

Volvo's image also rose among a number of those who played its game; 21 percent of those surveyed said they had a better image of Volvo after playing the game. The game also seemed to drive greater purchasing

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interest in the brand among users, with 37 percent of those surveyed indicating a greater likelihood of purchasing a Volvo.

The clear audience preference for games over traditional ads was borne out in the surveys: 93 percent of those playing the game sponsored by MSNBC.com expressed a desire for more games in cinema, and 86 percent said they preferred a game to an ad. Similarly, 68 percent of those playing the game sponsored by Volvo wanted more games, and 74 percent preferred a game to an ad.

David Polinchock, chairman of the Brand Experience Lab, contrasts this rate favorably with results from a recent Arbitron study of in-cinema advertising, with only 59 percent of moviegoers recalling viewing commercials at theaters.

Some take a more cautious view of the gestural digital signage/kiosk market. Although Steve Kartonchik, executive vice president of sales and marketing for ADFLOW Networks, finds gestural systems intriguing, he feels they don't have broad enough application and don't offer enough value, especially in the current economic environment.

Chapter 4

The future of the technology

A range of new technologies are likely to have a significant impact on the future of interactive digital signage and interactive kiosks in the next five years.

Keith Kelsen, executive chairman of The Media Tile Company, believes an array of interactive engaging technologies will dramatically enhance customer experiences with digital signage and kiosks in 2009. These experiences will be delivered in a variety of ways — on window touchscreens and floor screens, and in gesture-based interaction forms, for example. Kelsen anticipates larger rollouts of these experiences in 2009. Similarly, he expects mobile-driven digital signage deployments to expand significantly in 2009 and 2010.

Rick Sizemore, chief strategy officer at Multimedia Intelligence, believes mobile-driven digital signage has potential, but given the economic downturn, he thinks it's more likely that the adoption of mobile digital signage won't truly accelerate until 2010 under a best-case scenario that is dependent on economic developments in 2009.

Multimedia Intelligence recently released a report focused on networked digital signage that highlights the growth potential of mobile-driven digital signage. The report indicates why SMS could be central to the growth of networked digital signage over the next decade. According to the report, 40

percent of new network digital display platform installations will utilize SMS for interactivity by 2012, up from 7 percent in 2007.

In Kartonchik's view, mobile will become a part of the next iteration of digital signage, allowing users to opt in to retailer promotions via their cell phones in retail settings, receive special promotions and redeem coupons received via their mobile phones while they're visiting stores.

An array of interactive, engaging technologies will dramatically enhance customer experiences with digital signage and kiosk in 2009 - on window touchscreens and floor screens, and in gesture-based interactions forms, for example.

Antonio Camara, CEO of YDreams, predicts that gestural digital signage will become standardized in about five years and that the gestural interaction market will take off with the widespread delivery of gestural applications over Internet Protocol Television (IPTV).

One of the major growth areas for marketing-oriented gestural signage will be in open-space environments, such as store floors, where advertising traditionally never has appeared, said Vincent John Vincent, president of GestureTek, adding that the company

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has been particularly active in those environments. The addition of 3D cameras to gestural signage displays will add to the effectiveness of those displays and permit the development of even more dynamic and interactive experiences, he said.