

DIGITAL PLACE-BASED MEDIA

One day late last year while traveling in Israel, a colleague and I stopped at a coffee shop for an afternoon latte. As soon as the cashier entered the latte order, a small digital sign next to the cash register flashed to let us know of a new line of healthy sandwiches.

BY JOSE AVALOS
 Digital Signage Director, Intel Corporation, with contribution from Microsoft Corporation, NEC, HP and JCDcaux

THE FUTURE OF DIGITAL SIGNAGE: Integrated, Interactive, Intelligent Networks

Of course we couldn't resist, and immediately used the prompt from the screen to enjoy these additional items. We were delighted with our purchases and I am sure the owner of the coffee shop was equally delighted that we had upped our order.

But as someone with a deep interest in the future of digital signage (or as some in the advertising industry are referring to it: Digital Place-Based Media, or DPBM)—what was even more enjoyable was the seamless way that it helped convert an opportunity into a transaction: providing us with valuable information at an opportune moment (and not requiring the counterperson to remember to ask), making it easy for us to adjust our order on the fly (without holding up the line of patrons behind us), alerting the shop staff to add the new items (a lot less shouting required) and, finally, having our check automatically recalculated at the register (excellent integration with the POS). Digital signage was clearly adding value—and profits—to this business owner.

We've Come a Long Way

We've come a long way from the first in-store networks with their bulky CRT monitors and one-way delivery of repurposed TV content. Once analog and standalone, today's signage networks are increasingly digital and connected. As devices become digital and connected, they want to become intelligent. And as we have learned so many times, once a device becomes intelligent, it wants to become interconnected and cross functional. As in the example of the coffee shop in Israel, digital signage is, of course, a medium to display information, but it can also be a way to add to the customer experience, optimize store processes and provide another entry point to the POS.

Building brands and relationships with customers can only happen when you add value to their experiences—whether banking, retail or hospitality. Digital signage is the perfect way to achieve this

because it bridges traditional and online mediums: it can be not only informational, but interactive, communicating with customers where they are, in the manner they want to be reached. Irena Andonova, Microsoft's Director of Standard & Enterprise Product Management for Windows Embedded, tells me Microsoft describes it as "creating rich, connected and immersive user experiences."

Roberto Moctezuma, general manager of the Desktop Solutions Business at HP believes there is a significant opportunity in the digital signage space to make technology easier to purchase, deploy and use. He sees strong demand from companies who want to make their customer interactions much more targeted, engaging and relevant, with compelling solutions and platforms that will continue to be at the forefront of consumer and market demand.

Jean-Luc Decaux, co-chief executive officer of JCDcaux North America, one of the world's leading outdoor advertising companies, feels that digital signage is particularly effective in places where people tend to congregate and have long dwell times, such as airports. He tells me that they have also had great results by installing digital signage that promotes movies and TV trailers in bus shelters in cities like Chicago and Boston. It's interesting to note that even commuters respond enthusiastically when they can be entertained and given the chance to interact.

Challenges Limiting the Growth of Digital Signage

Today, networks of LCD screens delivering customized content are a familiar presence in stores, restaurants, schools, airlines, gas stations, health clubs, you name it. But underlying structural issues are keeping digital signage from reaching its full potential:

- From a technology perspective, the infrastructure supporting digital signage is exhibiting the fragmentation typical of an embryonic medium. There are a wide array of platforms for distributing, managing and displaying content on the thousands of networks in place today. But lack of standardization in

the underlying technology forces application developers to devote scarce resources to basic nuts and bolts operational issues and keeps them from focusing on new value-added capabilities addressing the needs of specific markets, such as restaurants or hospitals. The extreme fragmentation also makes it more costly for network operators to implement, manage and maintain their networks.

- Advertisers are showing increasing interest in digital signage—last year they spent some \$1.4B to market their products on screens in retail stores, theaters, restaurants, theaters. But to get an even larger share of brand advertising budgets, it must be easy for advertisers to make really big buys—the way they can now on TV, radio and the Internet. But with hundreds of independent network operators all competing for advertising dollars, there is no simple way for the big brands to make large scale media buys. Intel is in constant communication with network operators (Clear Channel, CBS Outdoor, JC Decaux), brand marketers and their agencies (WPP, Interpublic, Publicis, Omnicom, etc.) and the aggregators targeting digital signage (Adcentricity, SeeSaw Networks, etc.) and we hear the same word over and over: "scalability." Without the ability to easily make scalable advertising buys, the potential of the industry as an advertising medium will remain limited.
- Finally, there is the issue of metrics: robust audience metrics are needed so advertisers know who is watching their ads, when and for how long. Having this data creates a "common currency" that enables advertisers to evaluate their purchases in digital signage against other mediums, and also to provide network operators with the information to optimize the design and management of their networks. Recognizing these challenges and sensing the potential of the new medium, major technology companies are devoting considerable resources to address these issues:

Stable Development Environments: An example of making it easier and more cost effective for digital signage device-makers to create new, interactive capabilities that will drive the industry forward is exemplified by a recent launch: Microsoft and Intel announced a strategic relationship that has Microsoft's Windows® Embedded Standard 7 operating system optimized to run on the recently launched Intel® Core™ family of processors, such as the Intel® Core™ i5 and i7.

Microsoft's Irena Andonova believes that this validated platform from Intel and Microsoft will allow OEM's to develop and get new digital signage solutions to market faster and more cost-effectively—making a win-win for networks and retailers alike. In January, during the National Retailers Federation tradeshow, seven OEMs, including HP and NCR, demonstrated DS proof-of-concepts and several OEMs are currently working on the development of purpose-built media players, all based on the platform. According to Roberto Moctezuma, of HP, they recently announced a solution with touch capabilities, allowing advanced customer interaction.

Lowering the Cost of Network Operation: Expanding the role of digital signage requires that networks become simpler and less expensive to operate. At Intel, we have developed processors with built in technology that makes it possible to remotely discover and repair many network problems without costly onsite service visits. Operators of digital signage networks can set up new installations, download software updates, perform asset inventories, find and fix many problems, and turn the signs on and off for energy efficiency—all remotely.

Creating Scalability for Advertisers: To address the advertising scalability issue, NEC, the leading provider of LCDs in digital signage, has introduced its VUKUNET ad serving platform. As Ashley Flaska, VP Marketing at NEC, explained it to me, VUKUNET can link any network anywhere, making it easy for advertisers to quickly and easily distribute content to any screen in any location.

Taken collectively, these initiatives represent a significant investment in the future of digital signage. As Ashley Flaska notes, this level of R&D investment by NEC—along with comparable R&D investments from Intel, Microsoft and others—will be major factors in creating a more mature market in digital signage.

The Shape of Things to Come: Next-generation Interaction

Earlier this year, Intel provided a hint of what the future of digital signage might look like: an Intel "proof-of-concept" built on an Intel® Core™ i7 processor with the Microsoft Windows® Embedded Standard 7 operating system and using multi-user, multi-touch holographic display technology. Retailers can use this kind of configuration to give customers a next-generation in-store experience: exploring merchandise, finding out about promotions, submitting feedback on products, reading customer reviews, viewing past purchase histories and sharing what they discovered with their friends via social media and mobile phone integration. The Intel proof-of-concept also showcased metrics capabilities for documenting the audience interaction—addressing this key industry challenge.

Expanding the Promise of a New Medium

I hope my survey of these recent developments conveys to you the excitement and enthusiasm I feel about the future. Wherever I go today—whether it's a coffee shop in Israel or shopping with my family at home here in the U.S.—I constantly see new and innovative examples of how digital signage has firmly established itself as a powerful medium for enhancing customer experiences and driving sales. Now a new era of intelligent, cross-functional solutions are emerging: integrated and interactive with measurable audience metrics and a lower cost of operation.

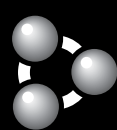
At Intel, we are delighted to be part of this vital medium and to work with Microsoft and NEC, as well as agencies, network operators and solution providers across the industry, to provide the critical building blocks that are making digital signage a success.

A new era of OOH advertising has emerged and Clear Channel Outdoor is leading the way ...

Clear Channel Outdoor now offers more than 450 digital billboards in 33 major U.S. cities.

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For more information contact Lou Giordano at 212/812.0055, or visit CCOdigital.com



CLEAR CHANNEL
DIGITAL OUTDOOR NETWORK



WE RECOMMEND

Economic Upswing p. 04
More screens. More money. More impact.

"...Digital place-based media commonly delivers a four to 50 percent sales lift, five to 15 percent more service inquiries, 40+ percent improvement in branding /recall, a 40 percent reduction in perceived waiting time..."

The Sharpest Instrument p. 03
Panel Of Experts p. 05

MEDIA PLANET

We make our readers succeed!

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Mediaplanet's business is to create new customers for our advertisers by providing readers with high-quality editorial content that motivates them to act.

Digital place-based media has been growing and maturing during the economy of this decade that started with downturn, included the uncertainties of post 9/11, recession, business uncertainties and a cautious investment climate.

What's In A Name?

Advertising-based networks give markets reach and recency, while an equal number of displays improve branding, staff and student communications, and the patron experience at a location.

"Digital place-based media," has a descriptive ring to it, and reflects the refinement of a high growth industry finding its place.

As the "supply push" inherent in any new technology-driven improvement has shifted to a "market pull," its naming has served to position it within business struc-

tures and budgets. "Digital Signage," a frequently-used, all encompassing descriptor, reflects the economies of a fully digital supply chain for media creation, management, connectivity and presentation. Terms such as "electronic display networks," "video networks" and "private media channel" have been used to describe the technology infrastructure.

In seeking its place in advertising plans and budgets, other descriptors have been used. "Digital Out-of-Home (DOOH)" generally describes ad-based networks seeking out-of-home ads, "In-store TV" sought a share of TV/broadcast ad spending and in being called "the Outernet," the medium

has tapped into Internet ad budgets.

Through this maturing of its identity, the inherent characteristics of the medium have not changed. It is a highly target-able, viewer-addressable display media. Central control of message delivery to digital displays gives communications flexibility and assures 100 percent compliance of message presentation to audiences at a time of day, in out-of-home locations where people shop, wait, work, commute and gather. It can provide a laser focus of message delivery to time and audience, wide demographic or geographic coverage, or anything in-between.

It is highly measurable, very cost effective and the sharpest tool in the communicator's tool chest.



Lyle Bunn
Principal & Strategy Architect, Bunn Co.

A Special Thanks To....



By enabling more content, mobility and capabilities than ever before, Intel gives you the advantage in a rapidly changing world. With advanced silicon, industry standard platforms and modular infrastructure solutions, Intel can help you deliver a more compelling digital lifestyle. Intel, the world leader in silicon innovation, develops technologies, products and initiatives to continually advance how people work and live. Additional information about Intel is available at www.intel.com/go/digitalsignage



Microsoft Windows Embedded is a high-performance and highly reliable embedded platform used by innovative organizations, as well as OEMs to deliver devices that stand out through rich user experiences and seamless connections to the world of Windows.



NEC Display Solutions is a leading provider of commercial LCD display and projector solutions, with an acute focus on digital signage. As a leader in this market, NEC powers VUKUNET, a universal ad serving and distribution platform that connects digital out-of-home networks with advertising revenue. Learn more at www.vukunet.com.



The Digital Place-based Advertising Association (DPAA) exists to create a forum for substantive, ongoing collaboration among advertisers, agencies, digital place-based advertising networks and their suppliers to drive consistent growth for the industry. DPAA's mission is to make it easier to plan, buy and evaluate the effectiveness of digital place-based advertising networks through the development of industry-wide standards, best practices and industry-wide research. www.dp-aa.org

The Event for Customer Engagement Strategies, Solutions and ROI through Digital Media

Customer Engagement Technology World
November 10-11, 2010
Javits Convention Center
New York, NY
www.CETWorld.com

April 27-28, 2011
Moscone Convention Center
San Francisco, CA
@CETWorld

Europe's Digital Signage & Digital Out of Home event

screenmedia expo | europe 2010
May 5th - 6th, Earls Court, London

For more info and to register visit www.screenevents.co.uk
Get global news at: www.screens.tv

The Digital Signage Show & KioskCom Self Service Expo

Focusing on Customer Engagement Strategies & Solutions

For more than a decade, we've stressed that digital signage, kiosks, mobile technology and future applications will only find long-term success through customer engagement. Whether in a restaurant, hotel, arena or airport—customer engagement remains the primary ROI driver.

Everyone's goal is delivering messages that incite action. The key here is turning everyday experiences into exciting, worthwhile engagement opportunities, while showing you understand consumers' time constraints.

What is needed is a strategy utilizing technologies AND engagement to drive customers to make purchases.

Our New York event marks another first in exploring technology and engagement strategies as KioskCom Self Service

Expo & The Digital Signage Show evolve into Customer Engagement Technology World (www.CETworld.com). This evolution exemplifies everything the event has always been—a strategic leader, providing education and resources, allowing attendees to improve programs and increase ROI.

A four-time winner of Tradeshow Week's prestigious Fastest 50 Award, the show continues to provide education, networking, technology and strategy-sharing opportunities for venues, brands, agencies, resellers, integrators and manufacturers. KioskCom & The Digital Signage Show will take place April 14-15, 2010 in The Mandalay Bay Convention Center in Las Vegas, NV.

Customer Engagement Technology World will be November 10-11, 2010 in New York and April 27-28, 2011 in San Francisco. Additional details at: www.cetworld.com, or by contacting lawrence@jdevents.com.



Lawrence Dvorchik
General Manager: Customer Engagement Technology World

"...customer engagement remains the primary ROI driver."

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The Sharpest Instrument In The Marketers' Tool Chest

The Wall Street Journal, on September 21, 2005, carried a page one article titled *"In a Shift, Marketers Beef Up Ad Spending Inside Stores"* describing that Procter & Gamble had cut its commitment to advertise on cable channels by 25 percent and its broadcast TV allotment by five percent, while at the same time overall ad spending rose slightly. It reported a focus by P&G on "the First Moment of Truth" when someone notices an item on a store shelf as "one of the most important marketing opportunities," and the firm's intention to take in-store marketing "from an art to a science."

Commerce happens out-of-home. Home offers a protected, nurturing environment in which we recuperate. Commerce in home generally includes using products, paying bills and researching, in order to mitigate the risk in future purchases.

Virtually all consumer spending happens out-of-home influenced by brand perception, features, benefits, pricing, promotion and ease of acquisition. Every sale is in competition against alternatives along a path to purchase toward the check-out counter.

"I'd describe it as 'ActivationMedia' because it is close to where the action is," says Dr. Bill Ratcliffe, a veteran of the marketing industrial complex, former WPP executive and currently SVP North America of BrainJuicer.

Jack Sullivan, SVP/OOH activation director, Starcom USA says, "The new frontier of digital out-of-home provides exciting opportunities to reach people in ways we couldn't before, as the medium empowers marketers to provide information, entertainment and more in a more relevant context for on-the-go consumers. Engaging the right audience is more important than ever, and the ability to reach active consumers efficiently, often at the exact point of their purchase decision-making processes, holds a lot of promise for adver-

tisers seeking innovative solutions to marketing challenges. And what we've seen in the market so far is just the beginning."

"This is addressable advertising, meaning there are precise targeting capabilities down to an individual screen or environment," says Rob Gorrie, CEO of Adcentricity. "Agencies find huge value in aggregated DOOH and brand marketers can take advantage of that granular targeting and mass reach power, and activate a program by channel, like health care environments (medical offices, pharmacies, and fitness clubs, for example), to target a specific geography or demographic with defined messages that are in context to the venue and viewers. You can think locally, while planning nationally. Not to mention, cutting down on the time it takes to do a campaign. Planning agencies have noted, 'what you have accomplished in 24 hrs would have taken me four weeks to do.'"

Scott Francis, chief technology officer of PRN which operates more than 64,000 displays in 10,000 locations says, "We've learned the networks that do best are dynamic, learning networks that provide actionable insights based on research and analysis of customer behavior at every touch-point in every location to deliver the best customer experience."

PRN President & CEO Richard Fisher describes the impact of smaller form factor

shelf-level display, a video endcap solution that PRN calls Product TV. "We worked with major brands such as Kellogg's, Excedrin, Listerine, Duncan Hines, Vick's...and tested over 33 products across 50-plus locations in two of the top 10 retailers in the U.S. Our average sales lift was 60 percent, some individual products went north of 180 percent! When executed properly, video next to product really moves the needle."

Jeremy Lockhorn, VP, emerging media at Razorfish says, "place-based video media offers location-specific audience targeting as well as insights that empower the advertiser to know what kind of venue they are reaching the consumer in, and to make certain inferences about the audience there and the corresponding mindset—all of which can inform creative and messaging strategy. Relevance matters, and place-based video media can be made highly relevant, leading to better return on ad spend."

Lockhart recounts, "This past holiday season, we developed a campaign for a large retail client aimed at keeping the brand top-of-mind while also leveraging place-based and location-aware media to drive foot traffic to their stores. We targeted screens (both digital place-based and mobile devices) within a 5-mile radius of their stores. We saw 16 percent lift in

visit/purchase intent and even higher lift across key brand attributes."

In addressing delegates of the recent Digital Signage Expo, Jose Avalos, Intel Corporation said, "As a powerful new capability within the media industrial complex, the analytics and impact metrics that underpin the digital signage value proposition, offer it the ability to increasingly be used in addition to, or instead of, less measured media."

Measurement is a primary consideration to assuring communications value and refining approaches for better results. The Anonymous Impression Metric (AIM) system from CognoVision, which was named the Best Measurement System in the 2009 DIGI Awards, uses face-detection and people-tracking based anonymous video analytics technology to gather data on how people watch content and how they move within a store. The technology can determine how many people watch, how long they looked for, their gender and age bracket, how they move within a store, and can also adapt advertising to cater to viewers in real-time (i.e. an ad can be changed based on the anonymous demographics of the viewers in-front of a screen). This information can be used to dramatically improve the effectiveness of ad campaigns, increase product sales and advertising revenue, optimize retail execution and reduce operational costs. The system respects privacy as no images or video are ever recorded and no personally identifiable information is ever stored.

Haroon Mirza, director of business development at CognoVision notes, "Our innovation allows for accurate, cost-effective viewer metrics and actionable business intelligence. We provide the numbers that digital signage networks, brands and retailers need to better run their busi-

nesses."

Walt Disney World is replacing printed menu boards in food and beverage locations in theme parks and resorts with digital signage. All content is to be driven by information mined from terabytes of data, using patron influences such as RF Cameras and iPhones to manipulate content in real time interaction with cast and guests. One example is found at Cosmic Ray's in the Magic Kingdom. Managers can notice guests, approach them, and find out what they happen to be celebrating on their trip. A quick snapshot and a couple taps on the phone later, the guest's image is displayed on the sign incorporated into the normal flow of the content. The use of specially targeted information has seen a lift of over 100 percent year-over-year sales on the specific item tested. Disney has chosen the Harris Corporation Infocaster product to manage media in all its parks and resorts.

Advertisers can plan for and use digital place-based media by contacting network operators directly (www.DP-AA.org), through network ad sales aggregators such as Adcentricity or SeeSaw Networks, or through online exchanges such as VUKUNET or rVue.

In announcing the VUKUNET ad exchange last year, Pierre Richer, president & COO of NEC Display Solutions said, "The Digital Signage/DOOH industry is a growing market that combines hardware, software and integration revenue. However, when one overlays the advertising revenue for digital out-of-home advertising on top of the digital signage components, there is a significant difference on the plus side. This is simply a great opportunity for network operators and for advertisers."

BY: LYLE BUNN

Bringing Messages To Life In The Workplace

"Visual is our new language," claims Paco Underhill, founder and managing director of Envirosell, whose books *"Why We Buy"* and *"Call of The Mall"* are published in 27 languages.

The power of visual communications applies to staff and student communications through digital place-based media as many organizations use the medium for internal purposes. As computer screens bog down with internal email messages and the memos abound, key messages related to priorities, directions, success and culture of the enterprise are presented on digital signage.

In a November 2009 survey conducted by the Digital Signage Association, 60 percent of 1200 respondents said they have no third party advertising on their displays, and 52 percent said their network was entirely employee-facing.

In facilities where not everyone has email access, or online time is limited, digital signage is a valuable piece of communications infrastructure. Displays at entrances and in waiting and gathering areas allow employees to keep abreast of corporate news and happenings.

Place-based media is increasingly used to trigger mobile website access, downloads and interaction, to encourage tele-

phoning to a pre-recorded message or to visit a website.

When linked with mass notification and alert capabilities, as is increasingly the case in the campus environment, it becomes a fundamental element of life at work and on campus. Many organizations use Digital Signage to inform their visitors of corporate news and directions. Increasingly, digital signage is more fully integrated into the form and function of retail, event, transit or gathering environment or a display, in which case it becomes "architectural media."

Architectural media is the integration of place-based dynamic media with physical infrastructure to provide a compelling, high impact experience in which the brand is clearly and powerfully expressed and communications goals can be more fully achieved.

Whether stand-alone or as part of architectural media, digital signage works to inform and influence to achieve staff, student and visitor communications goals.

BY: LYLE BUNN

SONY CASE STUDY

The Miami Heat of the NBA are known for using state of the art audio and visual effects in their game productions. Elements such as pyrotechnic, music and on-screen graphics contribute broadly to the overall game-viewing experience and are part of the fans' expectations at a Heat home game at American Airlines Arena. The team recently set out to extend that courtside experience to the rest of the arena.

Sony's Ziris digital signage system is a simple, yet powerful, solution for brand marketers and other professionals with complex needs for providing digital-out-

of-home content. This web-based solution gives signage managers a simple way to control their display content from anywhere, via the Internet, via the Ziris applications. Users can create display campaigns; manage delivery to up to 5000 screens and access analytics all from the Ziris dashboard.

The Miami Heat organization is able to compile assets into playlists or scripts, serve that content to media players throughout the arena's network and manage the components of the system from one central dashboard. The software is internet-based and scalable—al-

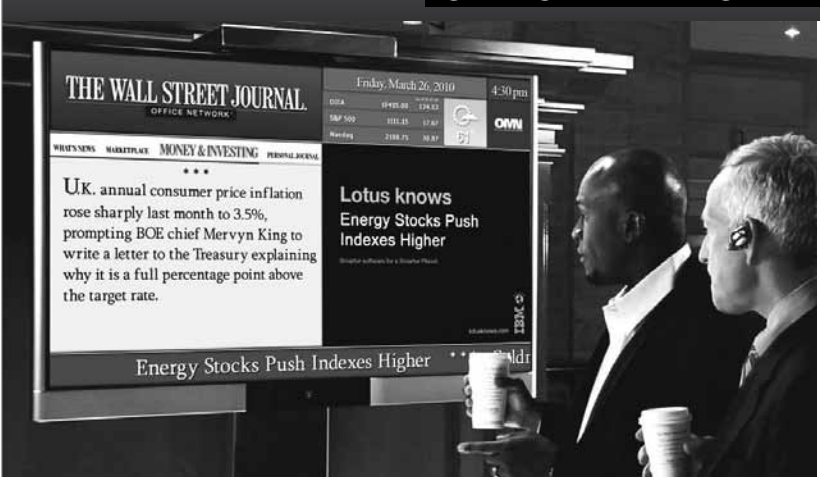
lowing the organization to implement both basic and sophisticated display content on single full-HD displays or intricate beyond-HD video walls from anywhere there is a web connection. The Heat deployed more than 550 flat-panel BRAVIA® high-definition LCD televisions; and professional monitors in the luxury suites, lounges, concourses, restaurants and administrative offices.



NETWORK PROFILE

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OFFICE NETWORK®



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The Digital Signage industry has been picking up speed at a double digit compound annual rate of growth as displays continue to be installed at points of purchase, transit, waiting and gathering, at and near where people shop, work and study to inform, influence and improve the experience at a location.

Economic Upswing

Arbitron Inc. reported in 2009 that Out-of-Home video as a medium reaches 67 percent of Americans 18 years and older each month, and delivers a fairly representative cross-section of consumers. 76 percent of those seeing digital signage noticed displays in multiple venues.

Its economic value is as an industry itself and as an enabler of the success of other industries such as retail, consumer products and services, hospitality, entertainment, transportation, financial services, manufacturing, academic and governments.

The industry, which generates an estimated \$1.6 billion in new technology deployment revenues annually, includes familiar names such as CBS, NBC, IBM, Synnex, Hughes and Harris as well as several thousand providers of technology and communications products and services. The production of content is estimated at \$3.5 billion annually drawing on 21,000 person years of creative effort annually. The industry is characterized as a long, low flat pyramid in which about a hundred organizations are dominant.

DisplaySearch reports that almost a million displays are operational in North America with a forecast of 23 percent Compound Annual Growth Rate (CAGR). Over 200 ad-based networks exist with several hundred other networks deployed for internal, patron and staff communications.

Sanju Khatri, principal analyst, digital

signage & public information displays with iSuppli Corporation who has been monitoring the industry since 2001 says, "No structural impediments appear to exist which would deter anticipated growth at a measured pace. Ongoing efforts to establish the legitimacy of the medium and market forces related to the application of this enabling medium could be expected to deliver growth as we forecast."

As an economic enabler, digital place-based media commonly delivers a four to 50 percent sales lift, five to 15 percent more service inquiries, 40+ percent improvement in branding /recall, a 40 percent reduction in perceived waiting time and an "improvement to a visit experience/environment" in the opinion of 80+ percent of location visitors. The medium can improve public and visitor safety, improve the effectiveness of staff training and improve marketing and communications cost effectiveness.

Amid a sharp downturn in U.S. and global advertising spending in 2009, digital out-of-home media networks remained among the fastest growing media in the world and will continue on an upward track through 2014, according to *PQ Media's Global Digital Out-of-Home Media Forecast 2009-2014*. Advertising spending on U.S. digital out-of-home video networks increased 1.2 percent in 2009 to \$1.4 billion, as spending in four of the five venue categories tracked by PQ Media grew during the year. While growth decelerated from the previous year, due primarily to the worst economic recession in 70 years, digital out-of-home media networks outpaced every segment of traditional advertising media—print,

broadcast and out-of-home—as well as U.S. and global economic growth.

And PQ Media expects the uptrend to continue at an accelerated rate from 2010 through 2014. Digital out-of-home video networks are expected to generate compound annual growth of 8.7 percent in the 2009-2014 period, reaching \$2.13 billion and adding more than \$700 million in advertising spending to this emerging industry. Digital out-of-home video advertising will again outperform each segment of traditional advertising in the period.

The approaches to Digital Signage network planning and deployment have been well-developed. Stuart Kirkpatrick, CEO of Digital Display & Communications, which is frequently recognized with industry awards says, "For planning, implementing or operating a network, or creating content, the foundation rule is 'thoroughly understand what effect you want to have on the audience and use common sense to get there.' We are not reinventing the wheel here."

As the industry has been growing, network operators have been refining viewer research and operating approaches, while agencies have been making changes to take advantage of this new medium. The industry has been advanced by several associations.

"Our mission," says Suzanne La Forgia, president of the Digital Place-based Advertising Association (DPAA), formerly the Out-of-Home Video Advertising Bureau (OVAB), "is to make it easier for advertisers and marketers to plan, buy, and evaluate the effectiveness of digital place-based advertising networks through the development of industry-wide standards, best

practices and industry-wide research."

David Drain, executive director, Digital Signage Association (DSA) says, "DSA is working to accelerate the growth and advance the excellence of those digital signage deployments."

"Whether you are interested in promoting products in a retail environment, providing directions in public spaces or communicating with employees behind the scenes, audiovisual professionals can create smooth digital signage deployment strategies," said Randal A. Lemke, Ph.D., executive director and CEO of InfoComm International, the trade association representing the commercial audiovisual industry. "InfoComm has over 5,000 member companies that along with 30,000 attendees will converge at InfoComm 2010 in Las Vegas in June."

One such integrator, Multi-Media Solutions Inc. has delivered digital signage systems for retailers, universities, hospitals, manufacturing facilities, churches and museums and provides ongoing support and content for the system. "Digital signage uses our inherent knowledge of technologies (AV and IT), integration and project planning and deployment to deliver the complete system," said Mike While, CEO of Multi-Media Solutions Inc.

The industry includes hundreds of technology and service providers which bring scalability and efficiencies.

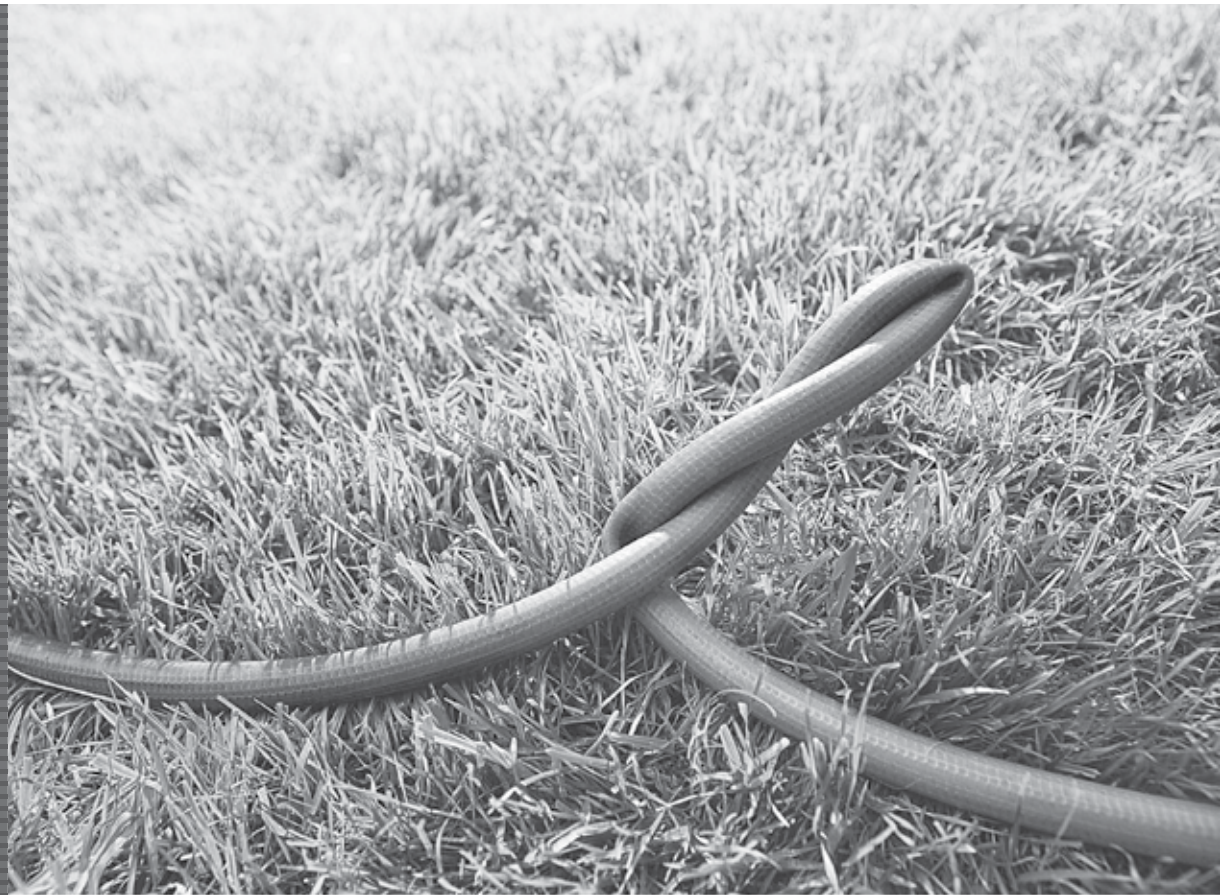
"The DS/DOOH industry has seen tremendous growth in the past years and with it, the need to efficiently and economically move increasingly larger volumes of the right media to an increasing number of displays," says Jacqueline Weiss, CEO, National Datacast Inc., a na-

tionwide digital media broadcast distribution network. She adds, "National Datacast Inc. brings proven reliability, capability and scale-ability at low-cost for enterprise networks."

“...digital place-based media commonly delivers a four to 50 percent sales lift, five to 15 percent more service inquiries, 40+ percent improvement in branding/recall, a 40 percent reduction in perceived waiting time...”

BY: LYLE BUNN

WE HELP THE DIGITAL OUT OF HOME INDUSTRY FLOW FREELY.



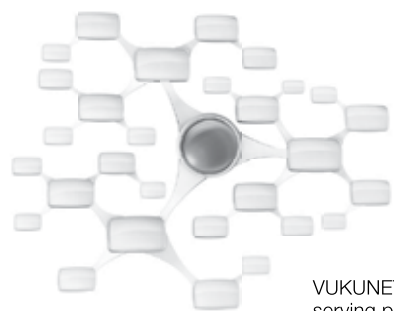
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Pierre Richer
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NEC Display Solutions
which powers VUKUNET



Question 1:
How does Digital Out-of-Home compare to traditional communications media?

Traditional media is a one way street, a monologue or an interruption (think commercial on TV or radio, ad in a magazine, etc.) DOOH, especially Digital Signage, can be both one-to-many and one-to-one interactive—it allows for a two-way dialogue that the consumer can manage, by opting in and moving the interaction online or mobile, etc. Secondly, traditional media is somewhat imprecise in its accountability and metrics, while DS/DOOH can incorporate technologies that document proof of performance.

Smart, connected digital signage is one of today's hottest technology trends. This new platform can be managed remotely from any location, and new content can be deployed nearly anywhere, and at any time. Additionally, smart digital signs deliver proven and measurable results by capturing consumers' attention through interactive experiences.

Digital place-based media is comparable to internet 15 years ago. It was an immature market lacking a single platform for advertisers to place ads on a significant amount of web sites. Once internet ad serving tools were launched in 1998, the internet really took off. Today, advertisers can finally connect all of the digital out-of-home screens together through VUKUNET to garner the impressions suitable for a campaign and finally compete with other traditional media.

Question 2:
What do you see as key directions for Digital Signage in 2010?

I see increased interaction between DOOH and mobile, web and social media applications. For instance, if I see something I like, I can text my opt in to the marketer, the special offer comes to my cell phone and then I can virally share that coupon or special offer code with my friends and family in real time, on my social media platform of choice. I also see increased interactivity between DS and POS—because DS is so close to the point of purchase, brands and retailers want to see the impact in their bottom line sales in real time. Many major retailers are already doing it—I believe it is going to become increasingly commonplace.

Today's market is focused on adopting the latest technologies to help better engage the consumer. With industry standardization underway and technology costs down, digital signage manufacturers and network operators will be able to rapidly create innovative solutions and approaches that will help advertisers to capture consumers' attention.

There will be further development of strategic partnerships that will help drive the industry to greater success. Those that don't move quickly won't be able to react fast enough to ever catch up. Innovative technology, forward thinking and dedication will prevail.

Question 3:
What is the most exciting part of this growing industry?

The incredible upside potential! Let's face it—our population is increasingly mobile and consuming media in very different ways than even 10 years ago. We are increasingly "mobile"...and what better industry to be involved in than Digital Signage?!... reach customers where they are and communicate with them how and when they are most receptive!

The most exciting part of this growing industry is the opportunity digital signage represents for the business community to implement fresh marketing scenarios, and the technology community to provide the platform that makes it possible to do so in an engaging and measurable way.

The recent technology advancements are extremely exciting to this industry. When you have companies like NEC and Intel making significant investments in R&D to find better solutions, problems are solved very quickly. We believe there has been a huge breakthrough with the new VUKUNET universal ad platform. This advertising media is now ready for prime time...look out internet.

NETWORK PROFILE

Premier Retail Networks, Inc. (PRN) provides innovative digital place-based media services that enable retailers, venue operators and marketers to engage millions of consumers across nearly 10,000 locations across the U.S.—in leading retail, dining establishments and places where consumers spend time spending money, from the time they leave their homes in the morning until they return at night.

PRN offers end-to-end and unbundled services to help venue operators improve customer experience and drive sales. The

networks PRN sells are unparalleled in their ability to engage captive consumers, enabling marketers to target over 210 million commercial viewers every month.

PRN's retail customers include Acme Markets, Albertsons, Costco, Jewel-Osco, Pathmark, Sam's Club, Shaw's, ShopRite, Star Market, Target and Walmart Stores. Through advertising sales relationships with Retail Entertainment Design, Target-Cast Networks and indoorDIRECT, PRN also represents networks located in Fred Meyer and Fry's Marketplace stores, and in over 2,300 leading dining venues.



SAMSUNG INSTINCT CASE STUDY: COURTESY OF ADCENTRICITY AUG 2008

With a late summer release of the Samsung "Instinct" touch screen smart phone, Samsung's objective was to launch the handset product in key markets in direct competition to the Apple iPhone. The goals were to increase product awareness, target key geographic areas and increase audience frequency, and take advantage of the creative capabilities of the digital OOH media to demonstrate the features and user experience of the new handset phone.

The target audience was young and social individuals aware of the latest technologies and knowledgeable of tech trends, features, and competitive

products. Utilizing the capabilities of Adcentricity's platform, a 30-mile radius was defined around multiple key cities across the country concentrating on hospitality environments; restaurants, bars, night-clubs, etc. With a focused consumer profile defined, the qualified and relevant venues and screens were selected with additional consideration of the campaign objectives and ad message.

According to a specific release date of the Instinct, the start date was assigned pre-release and ran 28 days in-line with the complete marketing mix. 650 Digital Out-of-Home screens were included in the plan in the following venue types:

sporting, events center, general night clubs, restaurants and bars. The results were powerful. 837,691 fifteen second ad spots ran making over 1,100,000 impressions. Samsung achieved a high level of Top of Mind for this campaign: 18 percent. Total unaided brand awareness was 73 percent, a 49 percent increase over the previous year. A significant gain was also registered for Samsung in the "Purchase Consideration test." 41 percent would consider the purchase of a Samsung phone. More importantly, 47 percent of Ad Aware would consider buying a Samsung cell phone, a strong indication of campaign effectiveness.

PROMO

About Intel & Microsoft:

Bringing Consumers & Brands The Smart Digital Signage Platform

Microsoft Corp. and Intel Corporation have formed a strategic alliance to deliver a platform that is optimized for the needs of the digital signage (DS) market. For brands and retailers, its flexibility and ability to create intuitive interfaces allows them an opportunity to track and build sales and customer loyalty. For developers, this optimized platform specifically for DS, is also designed to provide a robust, stable way to simplify new application development, enabling device-makers to focus on creating richer, smarter, more interactive signage solutions that can be managed remotely and deployed anywhere.

While the digital signage market has grown significantly over the last several years—there are now millions of screens in stores, restaurants, hotels college campuses, transportation centers, etc.—the technology supporting the industry is extremely fragmented. The wide range of incompatible platforms is making it difficult for application developers to design the enhanced capabilities.

Powered by the Intel® Core™ i5 and i7 processors and validated with Microsoft's Windows® Embedded Standard 7 operating system, this platform from Intel and Microsoft is designed to standardize the market and provide a stable platform that enables application developers and brands to more easily target the specific needs of end user customers—from stores and hotels to banks, hospitals and beyond.

Highlights of the optimized platform include capabilities to support

- Richer, more immersive user experiences (include panning and zoom, touch, and gesture input to dramatically improve Web browsing and the overall user experience)
- Anonymous video analytics that enable advertisers to measure the effectiveness of their campaigns with a range of audience metrics such as dwell time and aggregated data on the composition of the audience (i.e., age ranges of viewers.)¹
- Remote deployment and management capabilities that minimize on-site maintenance, updates and repairs, driving clear added value through lower total cost of ownership
- Power management through conditional user interfaces that react to the environment around them, enabling OEMs to create more energy efficient devices.

Multiple proof of concepts have been developed by Digital Signage OEMs using this optimized platform, with commercial versions expected to be available in the second half of 2010.

¹Audience data are fully anonymous, as the system does not perform any biometric analysis to identify or "remember" single individuals



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Digital Place-Based Media: A High Value Proposition

Sir Martin Sorrell, CEO of advertising giant WPP has said, "The digital economy is showing growth. I anticipate that a third of WPP business will be digital in the next five years."

Andy Johnson, executive creative director of the Walmart Smart Network describes the communications goal of "getting the right message to the right person at the right time to make commerce happen." "It is entirely about, "Return On Ad Spending (ROAS)," he said, noting that Smart Network results typically included increases in ad notice of 40 percent, recall of 32 percent and influence of 64 percent.

What digital place-based media means to the immediate future of communicators is that:

- The selling of products and services can be better achieved.
- Targeted communications can happen in a viable and efficient business model.
- An out-of-home platform exists to activate mobile and internet "audience-of-

- one" engagement.
- Data analysis can be advanced and data assets exploited.
- The work of communications can be done with minimal resources.
- Brand building, promotions and merchandising is focused fully on creative and effective messaging that speaks to and engages consumers.

"In working with several chains including Dunkin' Donuts, Burger King and Pizza Hut, in-store digital media has created enthusiasm among store associates, educated customers about new products and increased sales by as much as 46 percent on items promoted on digital media at the point-of-sale," said Noam Levavi, CEO of YCD Multimedia.

"Digital signage serves as a component of a larger consumer engagement

strategy that allows network operators to fill the gaps in their understanding of purchasing habits and in-store behavioral patterns," said Denise MacDonell, general manager of digital signage for Harris Broadcast Communications. "The technology behind digital signage can boost the ability of a business to engage with consumers on an intimate level, effectively lifting interaction to new heights. The investment in this kind of infrastructure is beyond simply playing video on attractive displays. It's about leveraging technology to raise consumer interaction with your brand."

The state-of-the-art Harris Corporation solution for the new Orlando Events Center comprises an HD video production and distribution and IPTV system, integrated with digital signage, which will

allow the Magic to address individual displays throughout the arena with stunning HD images that enhance the fan experience. Set to be the most technologically advanced arena ever constructed, the Orlando Magic's new arena will offer fans unprecedented access to event coverage, both inside and outside the arena, and provide significant new revenue-generating opportunities for advertisers.

"When compared against television, digital place-based media compares very favorably," says Cathy Stauffer, EVP market development of PRN. She adds, "PRN's networks, for instance, which are measured regularly by leading research companies, including The Nielsen Company, give advertisers access to larger audiences for less money than television. Our networks are located in leading retail centers and major restaurant chains across the country, places consumers visit frequently to spend time and make purchase decisions. Our engaging media

is customized, relevant and timely, and our screens are strategically placed and do not allow for ad-skipping. Put it all together and we deliver two-to-three times the brand recall of television. It's a very powerful value proposition."

Rob Gorrie, CEO of Adcentricity notes, "Today's advertising strategies are held to highest standards for ROI in history. At the same time, consumer behavior and media consumption has changed dramatically, creating a highly fragmented landscape for marketers to effectively connect with their desired consumers prospects. DOOH now offers an ability to engage consumers in environments that are a part of their daily lives. Utilizing the digital capability of the medium, marketers can effectively deliver meaningful and contextual messages that are relevant to consumer's behavior within the environment."

BY: LYLE BUNN

Changing Consumer Media Consumption Demands Better Communications Approaches

"The pace of change in the way that people consume media and the way communicating happens is accelerating, so the key issue for advertisers and other communicators is critical mass and efficient message targeting," says media pundit Shelly Palmer. "Digital place-based media is 'message targeting on steroids' because it reaches mass audiences, with strong geographic and demographic targeting, and is easy to plan and buy."

"The consumer is no longer tethered down in front of a TV screen or a computer screen at home or office" observes David Keene, Executive Editor, Digital Signage Magazine. "They have and are using technology on the go, on the fly, and the industries that used to dictate the flow of content are now finding themselves on the other side of the equation—scrambling to keep up with a fast-moving digitally enabled consumer. We live in an age when every person, and every place, is Internet Protocol (IP)-addressable."

Consumers' media consumption has changed, and so the media that is used to influence purchase decisions and other actions must change as well. No individual media can be expected to fulfill the communications and business goals, so each media type including digital place-based should be considered relative to the communications intent and overall media plan and purchase.

SeeSaw Networks has advanced the practice of Life Pattern Marketing™, the practice of placing companies' brand messages on digital place-based screens and billboards that are located where busy people really are: while they grab a coffee in the morning, get a workout in their favorite health club at lunch, while they shop for groceries in the afternoon and while they stop on their way home to fill their gas tank. "The key is context" says Rocky Gunderson of SeeSaw "The psychological impact on a consumer getting the brand message in many contexts permeates the "noise" and builds awareness and retention. Life-Pattern Marketing™ creates the perception of brand ubiquity, enabling companies to cost-effectively imprint their message onto the minds of those they are trying to reach and engage with them."

In 2009, SeeSaw Networks network of place-based digital video locations grew to over 35,000, and available weekly impressions grew to over 238 million per

week (815 percent over 2008). This reach is equivalent to a weekly nationwide 17 GRP (gross rating point) or 24 weekly GRP for the top 20 DMAs. SeeSaw's impressive reach, combined with innovative Life Pattern Marketing™ methodology, market leading campaign optimization planning capability, and compelling research and analytics allow brands in a broad range of verticals including automotive, financial services, retail, telecom, CPG, entertainment, and consumer electronics to benefit from place-based digital media.

Richard Fisher, president & CEO of PRN says, "digital place-based advertising combines the power of television with the proximity of place, and is an effective choice for advertisers. For brands and agencies, it's now critical to have a complementary mix of traditional and emerging media to engage consumers across many different touch-points throughout their days."

"As the impact of traditional advertis-

ing declines," says Michael Chase, VP marketing, sales & creative for St. Joseph Content, "and consumers who regularly use technology to do their research and shopping further shape and define our retail marketplace, brands must focus on 'new media' solutions, shopper marketing strategies and creating unique and richer connections between products and digital experiences; connecting print advertising, OOH, digital and augmented reality; and finally, fundamentally transforming marketing and media communications to cross-channel, participatory, interactive and two-way mediums. In becoming a formative part of the consumer 'path to purchase,' this potent medium has the power to reinforce key brand features and benefits at or near the point of purchase—persuading consumers and ultimately activating the sale."

Companies know that the more engaged a consumer is with their online content, the more likely the consumer is to make a "buy" decision so full multi-touch interactivity holds promise for increased customer engagement. As digital signage developers adopt these new full multi-touch capabilities into their applications, user's will be drawn to this immersive "digital consumer space" that brand marketers can use to introduce and reinforce their brand promise, to increase the level

of their customer intimacy, and to deliver a customer experience like never before.

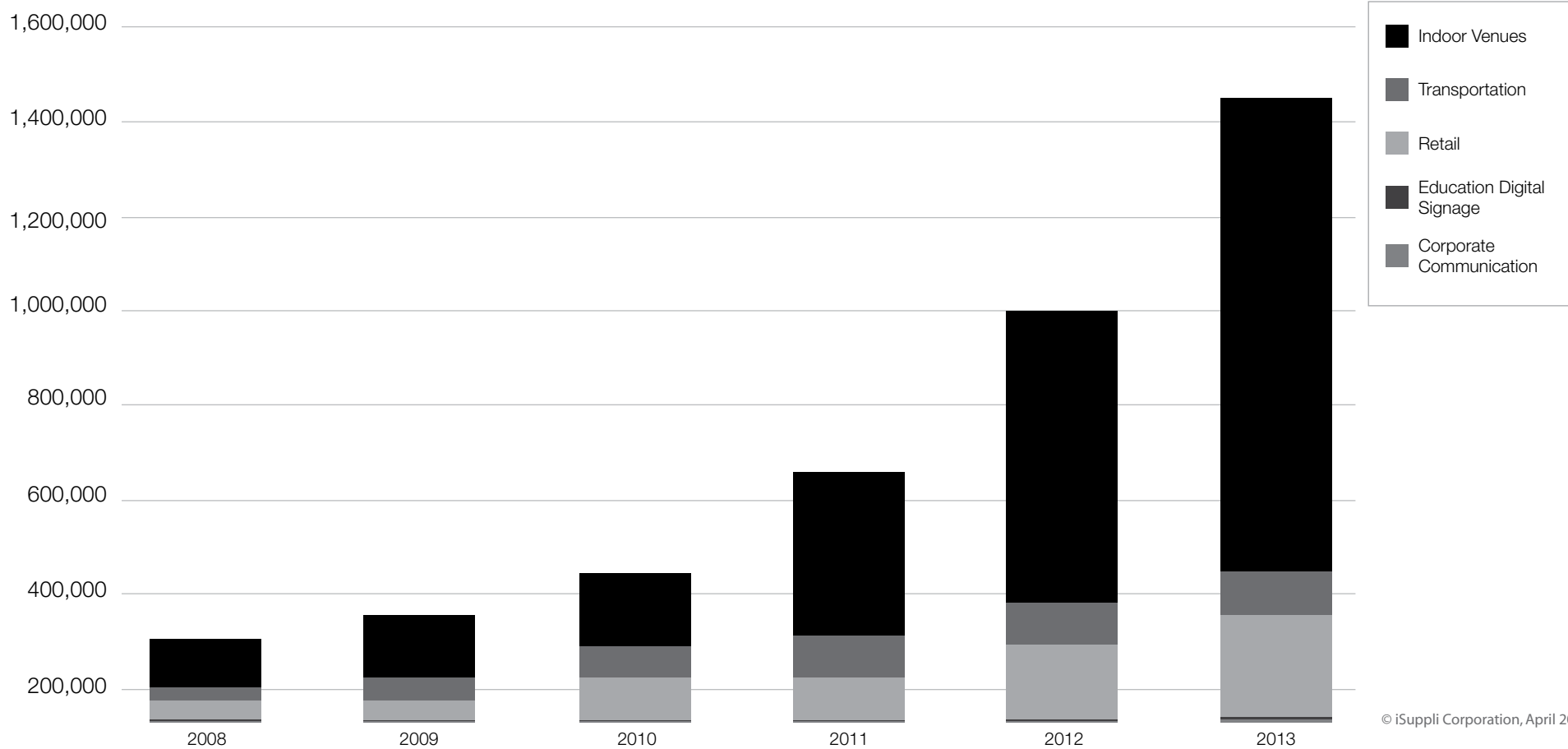
"Full multi-touch technology helps fulfill the promise of dynamic and immersive digital signage applications that engage consumers and help influence their buying decision," says Chris Colbert, general manager, 3M Touch Systems.

Everwell TV uses multiple consumer contact points. Loren Goldfarb, EVP, Content & Distribution of Everwell TV says, "Our engaging wellness and lifestyle content plays across the Everwell TV network in nearly 1,000 doctors' office waiting rooms across the country. Advertisers buy time across the network but also have the opportunity to reach consumers through our other platforms including our consumer web site, e-mail newsletters and iPhone app. In addition, ad packages can incorporate our growing list of high-traffic web partners, all of which feature Everwell's video content. The combination of Everwell's properties and those of our partners provides a truly 'surround sound' approach for brands and expanded revenue opportunities for Everwell."

As consumers evolve, savvy brands will communicate with consumers and patrons on their terms.

BY: LYLE BUNN

Unit Shipment, Digital Out-Of-Home Displays Market



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