



# GUIDE



# Digital Signage in the Hotel Industry

Digital signage applications are spreading throughout hotels, from the lobby to the conference center to the room. Learn about new concepts for informing and engaging hotel guests through digital signage, and how to make the network work for the hotel.

By Richard Slawsky | Contributing writer, Digital Signage Today

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# CONTENTS

Page 3	Introduction	
Page 4	Chapter 1	<b>The role digital signage plays</b> The lobby Self check-in Conference center Guest rooms The hotel campus Fitness centers
Page 7	Chapter 2	<b>Content is king</b> Social media integration Generating revenue Sidebar - Hyatt Place Jacksonville Airport hotel keeps passengers up to speed with digital signage
Page 11	Chapter 3	<b>Up-and-coming uses</b> Self check-in 4K, OLED and beyond LED displays Mobile integration Sidebar - Technology offers amenities beyond signage
Page 17	Conclusion	

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Published by Network World Media Group  
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Published by Network World Media Group  
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# INTRODUCTION

By Richard Slawsky | Contributing writer, Digital Signage Today

Every business wants the ability to communicate effectively with its customers, whether that communication is non-verbal or face-to-face.

One of the most effective ways to facilitate that communication is through digital signage. Digital displays are a part of nearly every aspect of our lives, from flatscreen displays in retail stores and restaurants to the full-motion video billboards appearing alongside the highway.

More and more businesses are working to improve the customer experience as a way to build and grow their businesses, and they're looking at digital signage as the mechanism for creating that experience. In the 2017 Digital Signage Future Trends Report, published by Digital Signage Today, 60 percent of retailers who responded to a survey listed "improved customer service" as a key benefit of digital signage, and 100 percent chose "increased customer engagement" as a key benefit.

In addition, 61 percent of all respondents listed "customer experience" as the top reason companies will invest in digital signage in the next two years, followed by "increased customer engagement" at 49.3 percent and "branding" at 45.8 percent.

And as further evidence of the power of digital signage, a report by research firm Markets and Markets projects the digital signage industry will total \$32.8 billion by 2023, up from \$19.6 billion in 2016. That's a compound annual growth rate of 7.4 percent over that time.

Hotels were at the forefront of the digital signage revolution with their in-house TV channels that promoted on-site amenities and nearby attractions. These days, the hotel industry is increasing the visibility of digital signage and making those screens the centerpiece of a visual campaign that reaches consumers even before they enter the lobby. A hotel that doesn't feature some sort of digital signage is actually becoming a rarity.

“The hospitality industry is always looking for ways to further cater to their guests,” said Dan Leunig, senior sales manager, digital signage division at LG. “When it comes to information, digital signage goes a long way in giving visitors information needed to enjoy their stay, from restaurants to shows, an effective signage solution provides it.”

The appeal of digital signage for businesses stems from the public’s growing comfort with the technology. In recent years, digital signage has gone from novelty to commonplace. It’s tough for someone to ignore the bright, dynamic movement of a digital display.

“Many studies show that digital signage, with its ability to portray images, employ sound and vibrant colors, can attract people like a magnet,” said Leunig. “Digital signage has the ability to catch people’s eyes, but the key is keeping it useful and providing concise information that is relevant.”

Increasingly, technology is something travelers expect as part of their hotel experience. A poll of lodging professionals conducted by Smartbrief Media Services indicated that 42 percent of Millennial travelers are more focused on a hotel’s technology than previous generations.

And a 2015 survey by research firm Software Advice found that 37 percent of respondents were at least moderately likely to choose a hotel with lobby technology, such as touchscreens and check-in kiosks, over one without.

And at the end of the day, digital signage makes good business sense. Through the technology, businesses can execute marketing and informational campaigns with relative ease and with unparalleled flexibility, all at a cost that rivals other marketing methods.

This guide focuses on how digital signage is being used in hospitality settings, including examples of worldwide deployments and new technology. It also explores some of the technology trends that are likely to be seen in the future of hospitality digital signage. We would like to thank Englewoods Cliffs, New Jersey-based LG Electronics, a provider of digital signage solutions, for its sponsorship of this guide, which allows us to bring it to you free of charge.





Time	Flight	Term	Destination	Gate	Status
12:35	LH 401	T1	NEW YORK	A 07	
12:40	AF 1419	T1	PARIS	A 12	
12:55	RG 7173	T2	SAO PAULO	B 05	
13:00	EK 046	T1	DUBAI	A 01	
13:05	BA 901	T2	LONDON	B 02	
13:15	UA 193	T1	LOS ANGELES	A 05	
13:35	QF 7308	T1	SYDNEY	C 04	
13:40	SA 700	T1	CAPTOWN	A 11	
				A 08	

# CHAPTER 1

## The role digital signage plays

Digital signage is a key component of the hotel experience, from check-in to checkout. In fact, the process of communicating with a hotel guest is likely to start long before they actually set foot on the property.

The development of technologies that allow digital signage to be placed outdoors is opening up opportunities to begin the conversation with guests from a mile away or more. Many properties now have billboards displaying full-motion video mounted by the roadway or on the side of the building.

“The trend in the hotel business has always been just to advertise room rates outside,” said Ben Barr, regional sales manager with Danville, Illinois-based Watchfire Signs, a manufacturer of digital signs and LED billboards for outdoor use.

“However, the national brands are now starting to implement message centers in their programs,” Barr said. “In a lot of cases, it’s the small or independent franchise owners who are making those decisions.”

### The lobby

Once the guest sets foot on the property, though, that conversation can begin in earnest. Digital signage can accomplish a variety of tasks in the hotel lobby.

“Hotel patrons typically sit in the lobby for longer amounts of time compared to other areas of the hotel,” said Trey Courtney, global SVP and chief product officer for Mood Media, an Austin, Texas-based media solutions company dedicated to elevating the customer experience.

“The content displayed on digital signage should be focused on longer video files or television programming mixed with localized messaging catered toward the longer dwell time of customers,” Courtney said. “Either syndicated media networks or live television are great options for digital signage in the hotel lobby.”

Video walls located in the hotel lobby can offer a “wow” factor to impress guests and create an atmosphere of being on the cutting edge of technology. In addition, lobby signage can be used to inform hotel guests about nearby restaurants and shops as well as ways to get around.

Case in point: When LG Electronics LG USA partnered with Marriott Hotels to enhance the guest experience at the Charlotte Marriott City Center in Charlotte, North Carolina. LG upgraded the hotel lobby with a 55-inch LED screen that provides wayfinding to guests.

Guests can also visit the M Club Lounge to use LG Studio kitchen appliances or watch TV on a OLED screen. And once guests enter their rooms, they can watch TV on an LG 55-inch LED TV.

“There is a definite need for digital signage in the hotel lobby as a means of wayfinding,” said officials from Washington, D.C.-based TransitScreen, a maker of real-time transportation information displays. TransitScreen is currently live in nearly 1,000 locations around the country, including at the Hyatt Place in Arlington, Va.; the Homewood Suites in Washington, D.C., the Radisson Red in Minneapolis; and the Arlo Hotel in New York.

“People aren’t familiar with the area, they don’t know which transportation options are near them and can help them navigate the city,” the TransitScreen team said.

So rather than depend on hotel staff to be up-to-date on local attractions, that information can be controlled with the lobby signage.

“Finding the best destinations and recommendations for dining, excursions and more are critical to hotel guest experience and providing the desired experience from the brand perspective,” said Daniel Ramirez, president of San Diego-based Porter24, a digital advertising company that provides hospitality solutions through a touchscreen concierge. “The challenges when expanding to new regions is to become a virtual expert of said city or area.”

## **Conference center**

The first thing people attending a trade show or convention need to know is where to find the conference center. The same wayfinding concept that works for lobby signage applies to the conference center as well.

Such technology is key in particularly large locations or in those where accessing meeting space requires detailed directions. The signs can be most effective in situations where hundreds or thousands, of people are walking the halls of the hotel each day for conferences and trade shows. During conferences, room names and numbers can change several times per day. Also, because every conference or expo is different the look and visual feel of the signage may need to change depending on the event.

Using wayfinding signage can pay dividends financially for event organizers. Instead of spending thousands of dollars on large banners and stand-up signs. Because digital signs can be changed quickly, a wayfinding system also solves problems associated with room and time changes.

Digital signage also eliminates the need for hotel employees to print paper signs for room changes during conferences. This saves employees the time of printing and delivering the signs to their locations, while also eliminating printing costs for the hotel.

To aid with wayfinding, a touchscreen sign could be set up so attendees can see their schedule, room information and even a map to their rooms, and have that information transferred to their mobile phone or other device.

New Albany, Ohio-based real estate firm Olshan Properties, for example, recently completed a \$27.3 million transformative interior redesign and amenity enhancement of the Hilton Columbus at Easton in Columbus, Ohio. Digital signage was a key part of the process.

In addition to a remodeling of the entryway and lobby, the Hilton Columbus at Easton added more than 9,000 additional square-feet of meeting rooms and event space. Each meeting room now has a digital reader board with up-to-the-minute information on the events taking place, as well as multiple reader boards located near elevators and entrances to stay current with hotel-wide events, weather updates, and maps of the conference space.

The hotel also installed a Virtual Concierge touchscreen where guests can get information about flight updates, directions to local attractions and more.

## **Guest rooms**

Studies of the hotel industry indicate that 98 percent of hotel guests watch television in their rooms and that they do so for an average of three hours a day. To cater to those guests, hotels have spent countless dollars replacing outdated, bulky tube TVs with flat screens in guest rooms, enabling operators to use the sets to communicate with patrons.

In fact, an in-room hotel channel is the original digital signage network. It plays dynamic digital content in the form of movie trailers and local TV spots.

But with the speed at which digital technology is developing, many hotel operators find it a challenge to keep up with guests' expectations, particularly when it comes to streaming content from computers or smartphones to the in-room TV or tapping into IPTV channels to view specialized content or programming in a guest's home language. Many of those features weren't available on displays sold just a few years ago, leaving operators who made a huge investment in digital displays looking for a way to offer those features without scrapping that investment.

To address that need, companies are introducing set-top boxes that can add such features to legacy televisions. LG Electronics, for example offers a line of set-top boxes for the hotel market. Its Pro:Centric Smart STB-3000 provides advanced smart interactive IPTV functionality as well as a broad range of compatible third-party System Integrator applications to RF-only legacy commercial televisions from LG and other brands, allowing hotels to enhance the guest experience without having to replace their existing TVs.

And for hotels about to make an investment in new in-room TVs, LG has its Pro:Centric line of Smart Displays. The displays range in size from 43 inches to 79 inches and are available in resolutions up to 4K. The displays feature a customizable welcome screen that can be programmed to greet customers by name. Guests can wirelessly stream video content to the display and play music on their device through the TV's speakers.



Ultimately, in-room displays are becoming more than just a way to keep guests entertained. Along with TV programming, movies and a connection with guests' mobile devices, those screens can be used as a portal to order room service, find information about the hotel's amenities and nearby attractions as well as enabling the guest to check out, settle their bill and arrange transportation to the airport or train station.

### **The hotel campus**

As travelers become increasingly concerned with getting the most for their money, many hotel operators are opening locations that are a destination unto themselves as opposed to being simply a place to spend the night. With some hotel complexes featuring pools as well as separate restaurants, casinos or other amenities, those complexes need a way to help guests get where they need to be.

Watchfire Signs faced that challenge at a DoubleTree Hotel in Danvers, Massachusetts, just outside Boston.

"There's a large waterpark attached to that property, and they used digital signage for directional aspects," said Watchfire's Barr. "They also have smaller signs throughout the parking areas using the same directional concept."

Barr saw a similar deployment at the Opryland theme park in Nashville, Tennessee.

"They had some interactive maps that would guide people around the park," he said. "At the same time they're also displaying advertising for some of the events they have."

### **The fitness center**

As part of an effort to cater to a health-conscious clientele, more and more hotels are including fitness centers as part of their on-property offerings. More than 85 percent of hotels in the United States offer some sort of fitness center for guests, according to surveys conducted by the American Hotel & Lodging Association.

While in the past a hotel fitness center often meant a few dusty, outdated exercise machines tuck into some nondescript room in an unused area of the hotel, many of today's fitness centers include top-of-the-line equipment supplemented by video walls or televisions to keep those guests informed and entertained during their daily workout. Audio headsets allow guests to view their preferred content without disturbing others.

Marriott Hotels, for example, turned to long-time technology partner LG Electronics to provide visually stunning digital signage displays to transform dated gyms into modern workout centers that excite and engage today's fitness-oriented travelers. The company implemented a 3x3 video wall of 47-inch class LG display panels and LG soundbars in its downtown Charlotte, North Carolina, property's newly renovated fitness center. By marrying state-of-the-art video, flexible space and sound technology with compelling third-party content, Marriott is breathing new life into the hotel fitness experience.

Paired with a massive catalog of virtual fitness classes from Fitness on Demand, the LG displays were daisy-chained together to create a fully immersive workout experience. Guests

are able to enjoy an interactive, high-energy workout, whether in a group setting or during a “solo” fitness session. Fitness on Demand brings a variety of challenging, interactive workout experiences to the fitness center by offering 1600 classes (including on-trend workouts such as Zumba, Beachbody, Jillian Michaels and others).

There is no cost to guests for any of the on-demand services, providing extra incentive to use the facilities. The addition of “solo spaces” within the fitness center allow for “bite sized” 1- to 15-minute workouts, rather than participating in a 30, 45 or 60-minute class.

To ensure that design aesthetic remains consistent throughout participating Marriott hotels, a “design guide” will be distributed to provide hotel staff with a standardized yet customizable approach for the appearance of finished fitness spaces, which also will help cut design costs.

Feedback has been extremely positive with guests at the Charlotte property who have compared the new fitness center experience to an “elevated health club” workout.

Marriott Hotels employees at participating locations go through a half-day of training in order to best teach guests how to operate the fitness experience by themselves to ensure an enjoyable gym-going experience.

“LG’s immersive TV displays and high-end audio components bring Fitness on Demand’s content to life in a really exciting way,” said Garrett Marshall, vice president of Fitness on Demand. “We’re thrilled to be working with Marriott and LG to revolutionize the fitness experience for hotel guests, and make them feel like they’re right in the room with their fitness instructor, whether in a group or solo setting.”



# CHAPTER 2

## Content is king

Content is the foundation of digital signage. Although large displays and flashy graphics have their place, they're no replacement for meaningful messaging that ultimately generates a call to action.

Deployers of digital signage are facing challenges in creating content they didn't face just a few years ago. Many hotel properties are faced with developing content that not only looks good on legacy digital signage systems that may still have years of life left in them, but also content that takes advantages of the features of the latest 4K or 8K displays.

"Digital signage is everywhere in the hotel industry," said Jeffrey Smith, vice president of business development at New York-based software company Digital Social Retail. The company's products allow customers to simultaneously manage push notifications for Wi-Fi signage and on any mobile device from a single platform.

"Whether it's in a conference, whether it's in a display area, the fitness centers, whether it's being used as a check-in/check-out kiosk, it's a reality for hotels," Smith said. "But once they've put these digital signs into the hotels, it's going to become an issue of how to manage that content and how to properly format it."

Still, there are some basic things to keep in mind in terms of digital signage content no matter how it will be displayed.

"We believe all content that we show needs to be three things: relevant, timely, and actionable," said TransitScreen officials. "All of our design choices are user-focused and user-tested to make sure we are providing the best possible experience," the team said.

First and foremost when considering content design, experts say, is know your audience. Who is watching your screens and for how long? What are they doing while in front of your digital monitors? Where are your screens located?



“Answering these initial questions will provide insights into the content and design required for an effective content strategy,” said Mood Media’s Courtney.

“For example, bringing media content focused on nature in the form of high definition atmospheric visuals is one best practice for showcasing unique content and layout design,” Courtney said. “Additionally, digital artwork and minor animations can easily captivate the consumer and make your brand appear more tech savvy.”

Providing relevant and useful information and experiences through your content is critical to becoming a permanent part of the hotel lobby landscape, said Daniel Ramirez, president of Los Angeles-based Porter24, a digital display company that provides hospitality solutions through an interactive touchscreen concierge service.

“What’s useful to a tourist?” Ramirez said. “Knowing if their plane is delayed, planning their day and travel around the must-see and do locations, and determining services and offerings from the hotel and local establishments that can enhance their visits.”

## **Social media integration**

Since the launch of Facebook in 2004 and Twitter in 2006, along with a host of other applications, social media and networking has become an integral part of our lives. As such software developers see its integration into the signage medium as a logical step forward.

Social media-enabled screens can serve a multitude of functions. For instance, some bars are using screens to stage interactive games for visitors who can play against other patrons — whether they are at the same location or elsewhere in the country — by texting answers to the screen with their cell phones. Restaurants also are using signage to display Twitter messages mentioning certain words or phrases, such as the name of the establishment or a specific beverage, that resonate with patrons inside the establishment.

Hotels hosting conferences can display Twitter feeds from that conference, so attendees can keep up on the latest happenings even when away from their computers or phones. All the material, of course, winds through filters that ensure only appropriate content is posted.

“The absence of social media from a digital signage system can be considered a glaring error of the strategy,” said Michael Ha, East Division sales manager for Pro Series Monitors for LG Electronics. “As the means by which countless people — namely younger, tech-savvy generations — are communicating with each other, social networking is considered crucial. If you are active in the social media universe, they could be communicating about you.”

## **Generating revenue**

Businesses are in business for one reason: to make money. Digital signage offers an additional revenue stream through external advertisers who want to reach out to a hotel’s customers and lure them to its particular business or site.

Through such partnerships, hotels can accept ads from those companies vying for business from travelers. A variety of studies indicate that more than 54 percent of hospitality companies generate revenue by sharing deals from nearby merchants.

“This is a great opportunity for local businesses and restaurants to promote themselves to visitors in the region and a great way for hotels to generate additional revenue,” said Mark Stross, chief technology officer with Purchase, New York-based signage company ANC Sports. “The hotel can use the signage to create a local portal that businesses will be excited to be displayed on.”

In addition, shifting that information from hotel staff to a digital sign can ensure accuracy when giving advice and help free up those workers to perform other tasks.

“Coordinating with third-party content is a no-brainer when you consider that the average hours of a physical concierge can rarely compete with that,” said Porter24’s Ramirez. “There is so much opportunity to benefit both hotel and event guests in conjunction with local businesses and destinations.”

Hospitality companies should integrate call-to action features in their digital signage such as QR codes or a number guests can text to receive a mobile coupon or additional information on local attractions.

Software platforms can divvy up a screen to allow a company’s brand to be anchored in a certain section and its product promoted. At the same time, another section can display feeds from social media sites and another can run TV programming.

“With the flexibility of signage, company displays are limited only by their team’s imagination,” Leunig said. “Deployers have been calling for added flexibility throughout the infancy of digital signage, and developers have listened.”

## **Hyatt Place Jacksonville Airport hotel keeps passengers up to speed with digital signage**

Dec. 6, 2016

Hyatt Place Jacksonville Airport, a hotel close to Jacksonville International in Florida, plans to deploy a FlyteBoard digital signage flight information display to help guests grab their flights on time. FlyteBoard, a division of Industrial Television Services, will deploy the display in December, according to a press release.

“Most of our guests are business travelers moving through Jacksonville International. We also handle several crew room contracts. That makes having a FlyteBoard flight information digital signage display a very important service for us,” said Marcus A. Patrick, general manager, Hyatt Place Jacksonville Airport. “I managed another airport property in Atlanta that had FlyteBoard. FlyteBoard proved its value as a guest service amenity. We saw that our guests congregated in front of it to verify their flight times and confirm transportation.”

The display can also offer weather forecasts, traffic information and advertising.

“The display is easily upgraded with Doppler Radar weather, local traffic, property promotions and other relevant content that travelers value,” Scott Triphahn, vice president of FlyteSystem, said in the release. “FlyteBoard and our other displays are often used as revenue generating solutions with information that is welcome throughout a traveler’s day.”

*Source: DigitalSignageToday.com*



## Up-and-coming uses

The capabilities of digital signage advance seemingly by the day. While just a few short years ago few displays were interactive, today devices such as smartphones and tablet computers have imbued consumers with the expectation of being able to touch the screens they see and get a reaction.

While a 42-inch 1080p flat panel display was once the height of technological development, today displays less than an inch thick and with resolution of 4k or better are becoming commonplace.

And the increasing prevalence of self-service technology means consumers are demanding the option to avoid lines and take care of simple transactions without having to interact with another person.

So while this list is by no means comprehensive, here are some of the technologies taking hold in a hotel near you:

### Self check-in

Many customers coming into a hotel simply want to get to their room to rest and relax. Much like airlines at airports across the country have gravitated to self check-in mechanisms through digital signage, hotels are following suit. With special kiosks, customers can bypass the front desk — and occasional long lines — to retrieve their room keys, purchase room upgrades and perform other common functions.

Those self check-in stations also can be set up to print boarding passes, tickets to local venues and attractions and directions to certain locations. Freed from data-entry chores, hotel employees are able to interact with guests on a more personal level.



And more and more, many of those self check-in kiosks have at their core a tablet computer such as an iPad or Microsoft Surface device. Some kiosk designs allow for those tablets to be undocked from their mounts and used as an assisted service device.

In a busy hotel, for example, staff could come out from behind the counter, undock the tablet from its mount and walk around the lobby to assist guests. And when the transaction is complete, the tablet can be returned to a dock and go back to functioning as a kiosk.

There will be times when a guest might walk up to an unattended kiosk and check in or do something that doesn't involve having to talk to a person, said Adam Aronson, CEO of San Rafael, California-based Lilitab, a maker of tablet-based kiosks and kiosk enclosures. There will be other times when they are going to be talking to a person, and that person's going to have a tablet in their hands to help them do their job.

"So in the middle of the night someone could come to your hotel, walk up to an unattended kiosk and do all their check-in by themselves, get a key issued and go to their room," Aronson said. "But another time, when a busload of people come in staff can have devices in their hands so they can walk around and check in guests. As the needs of the business change throughout the day those devices should be able to do both duties as needed."

## **4K, OLED and beyond**

While just a few years ago 1080p resolution was the standard for digital displays, 4K resolution is becoming increasingly commonplace with 8K coming down the pike. Those ultra HD resolutions mean content looks crisper and more realistic than ever before.

Still, it's critical to display content designed to maximize the effectiveness of those displays. Showing content geared for 1080p resolution on a 4k display is likely to lead to disappointing results.

"Content is always king so it is imperative that hoteliers invest in producing 4K content when at all possible," said Jacob Benner, director of sales, Hospitality Products, with LG Electronics.

And LCD displays are no longer limited to the 16:9 orientation of the past. LG Electronics, for example, offers a line of stretch displays in sizes of either 7 feet by 13.3 inches or 7 feet by 24 inches. Those displays can be mounted in either landscape mode, suitable for applications such as queue management, or portrait mode, making them the perfect building block for a four-sided digital display pillar.

And Organic Light Emitting Diode technology, or OLED, is shaping up to be the next stage of display development. According to OLEd-Info.com. OLED is a light emitting technology made by placing a series of organic thin films between two conductors. The films emit light when a current is applied, eliminating the need for a backlight and as such allowing those displays to be much thinner than a traditional LCD display.

Advantages of an OLED display, according to OLED-Info, include improved image quality, higher brightness, fuller viewing angle, a wider color range, much faster refresh rates and lower power consumption. OLED screens can display content on each side, making them a perfect freestanding sign that can be placed in the middle of a hotel lobby.

“OLED is new to everyone and clients are investigating ways to use them effectively,” Benner said.

In July 2017, for example, LG Electronics USA unveiled its LG OLED Wallpaper Hotel TV. The 65-inch display is just 3.86-mm thick and designed to be seen from wide viewing angles.

The display features a thin flat cable to allow the panel to lie flush against the wall. It also comes with Pro:Idiom’s digital rights management system and LG’s Pro:Centric Smart applications platform to allow users to navigate LG’s content within interactive platforms. The Hotel TV also supports 4K and high dynamic range formats.

“The LG OLED Wallpaper Hotel TV lives up to the unrivaled ability of OLED to deliver the very best picture quality available today, and its sophisticated form factor will not only capture guests’ attention but leave a lasting impression,” said Michael Kosla, vice president, hospitality, LG Electronics. “As the world’s first LG OLED Wallpaper TV for hotels, this innovative new display is sure to revolutionize the way luxury hotels and resorts elevate the in-room experience for premium guests.”

It’s likely that within the next few years companies will introduce flexible OLED displays that can be rolled up and tucked away when not in use.

## **LED displays**

LED displays, which originated with the time and temperature displays once common on the outside wall of the local bank, offered a much lower resolution than the LCD screens used in most indoor deployments. But because they are typically viewed from a much greater distance the resolution wasn’t as critical.

As technology has improved, though, the distance between individual LEDs – known as pixel pitch – has become smaller, resulting in significantly greater resolution. In addition, those screens can be manufactured in any shape and size desired. LED displays are making inroads into markets one dominated by projection and video walls.

Fine pitch LED displays are much brighter than LCD displays, making them an excellent option for outdoor signage or situations where ambient light may be a challenge. The image on an LED displays looks uniform even when viewed off-axis, making them ideal for applications where viewings might be looking at the screen from a variety of angles.

An example of what’s being done in the LED space can be seen in the heart of New York City. In August 2017 Sansi North America (SNA) Displays, a manufacturer of custom LED displays and lighting solutions, unveiled a wraparound 17,000-square-foot LED display outside 701 7th Ave., also known as 20 Times Square. The space is home to a 452-key Marriott EDITION hotel along with several other corporate tenants.

The display canvas is one of the largest continuous exterior displays in the world as well as the largest LED screen in the world built with exterior 8 mm pixel pitch technology. With 8K Ultra-HD processing, the project’s main screen is built to accommodate the next generation of video and broadcast media content.

At present, the price of LED displays is higher than a similarly sized LCD display or video wall, but those prices continue to fall.

## **Mobile integration**

One of the next major challenges for signage deployers is to find ways to deliver content specifically targeted to the person standing in front of the sign. Thanks to technologies such as anonymous video analytics and beacons, that challenge is being overcome.

Although commonly—and incorrectly—referred to as facial recognition, anonymous video analytics use a camera mounted on a digital display to gather some basic information about the viewer, including gender and approximate age. That information allows deployers to deliver content specifically targeted to those demographics.

A middle-aged man, for example, might be served up content about a nearby golf course, while a teenage girl might be a candidate for an ad for the local clothing store.

To deliver content that's even more personalized, signage companies are exploring the integration of digital displays with beacon technology. Such technology allows for communication between a beacon and the app residing on a guest's mobile phone.

That communication could allow for signage to address a guest by name, or deliver relevant content directly to their mobile devices. If a guest has a hotel's app on their smartphone and has Bluetooth enabled, the display can sense that app and play content specifically targeted to that guest. A digital sign by the hotel entrance might welcome a guest by name as they pass by, or a self check-in kiosk might automatically pull up a guest's account information as they approach the device.

TransitScreen, for example, has been working on beacon technology to alert smartphone users within a certain distance of one of the company's screens, and then display the information directly on their phones. And all LG displays rated for 24/7 use incorporate beacon technology that can leverage smartphone apps.

"If you've been in the industry for the last 20 years or so, companies were deciding on whether or not to make an investment on a website," said Digital Social Retail's Smith.

"Now it became the mainstay and today companies wouldn't even fathom the idea of not having a website," Smith said. "We can give them that same digital experience in a real-world environment using this proximity technology. Guests are going to be wowed by it and it's going to become the standard across the board."



## Technology offers amenities beyond signage

The Styler - Guests can steam and refresh their garments in under 20 minutes.

### **Reduce wrinkles**

LG Styler's deep-penetrating steam and gently moving hangers reduce wrinkles in your clothes. It's the easy way to look fresh and extend the appearance of your clothing between dry cleanings.

### **Vanquish odors with the gentle power of steam**

The LG Styler's TrueSteam® technology reduces the odors that cling to fabrics, knitwear and even delicates. You'll effortlessly make odors from smoke, sweat and food a thing of the past.

### **Sanitize clothes, toys and more**

The Sanitary cycle powered by TrueSteam® helps reduce allergens in clothes, bedding, sportswear—even your children's plush toys. LG Styler can help sanitize the fabrics in your home easily.

### **Gently dry delicates**

LG Styler's low temperature drying system dries clothing and delicates you normally dry on a rack much faster than air drying.

### **Keep pants looking crisp**

The LG Styler includes a special compartment in the door that helps restore the crease while reducing wrinkles at the knee, waist and everywhere else your pants can wrinkle.



<http://www.lg.com/us/business/commercial-display/vertical-markets/hospitality/lg-S3RERB?cmpid=Media|B2B|ComDisplay|Hospitality|Vertical|Networld|2017>



No matter where we go in our day-to-day lives, much of the messaging we encounter is conveyed by digital signage. From the doctor's office to the shopping mall, from the college campus to our houses of worship, digital signage is playing a central role.

It's the same for the hotel industry. Whether it's a mom-and-pop operation with a single property to megachain hotel company with locations around the world, digital signage is fast becoming part of the hotel experience.

And it's not just for show. That signage is making it easier for those hotels to serve their guests and communicate the messaging that will make their stay more enjoyable.

This guide was originally published in 2012, and the developments in the digital signage industry since then have been mind-boggling. The signage that's today becoming commonplace was just a dream those few short years ago. What will happen in the digital signage industry over the next five years is likely to be equally as mind-boggling.

Again, we'd like to extend our thanks to LG Electronics, whose sponsorship allows us to provide this guide to readers at no cost.