





Digital Displays Turn City Streets into Smart Sidewalks

Executive Brief insight.tech

"A picture is worth a thousand words." Cities around the globe are taking that axiom to heart with attention-grabbing digital signage on sidewalks, in metro stations, and at sports stadiums. By replacing traditional print media with smart displays, cities are discovering new ways to deliver value to citizens and businesses, and enhance city services.

For example, OUTFRONT Media is one of the largest out-of-home media companies in North America. It converted 110 existing static panels to <u>BoldVu</u> displays from <u>LG-MRI</u> at New York City subway entrances. This enabled OUTFRONT to reach 2.5 million people every day and generate millions in revenue for the city.

"These screens provide a platform to advertisers to reach the transit audience in a dynamic way, while affording us the ability to communicate with our customers before they enter the station," said Paul Fleuranges, Senior Director with the Metropolitan Transport Authority.

Beyond Advertising

And it's not just about advertising. Intelligent displays can serve as a nexus for a host of Internet of Things (IoT) applications. Thanks to built-in wireless connectivity, they can integrate with weather sensors for micro-climate tracking. City maintenance personnel can remotely connect to smart water meters and lighting controls. Private business and government agencies can offer localized services directly to citizens.

Adding a microphone and camera, they enhance public safety. If a system senses an event of potential concern, the technology can automatically and immediately notify appropriate service agencies.

OUTFRONT Media uses BoldVu displays at New York City subways, generates millions in revenue, and reaches

2.5M

people every day



In emergencies and disasters, communicating with citizens can be both widespread and nearly instantaneous. **Figure 1** shows an example of how and where displays might be deployed.

But because the world is tough on outdoor displays, most can't hold up to the conditions found in many cities. Intense sunlight, freezing weather, heatwaves, torrential downpours, and other environmental challenges can damage outdoor equipment. And the threats aren't all environmental: Vandalism is also a concern.

Plus, bright daylight makes a screen hard to see. We've all experienced the frustration of using our cell phones outside on a sunny day. That's why some installers are forced to place outdoor signage in shaded areas or provide cover to minimize sunlight interference.

Tough Displays, Seamless Integration

LG-MRI BoldVu Smart Points uniquely solve outdoor environmental challenges while offering amenities that cities, citizens, and visitors benefit from most. Sidewalk services range from transit information, interactive wayfinding, highlighting events, and pointing out places of interest.

Cities and media companies use BoldVu displays that seamlessly integrate with existing structures such as bus shelters. Targeted advertising generates revenue and a quick ROI for city government.



Figure 1. Strategically located Smart Points enhance safety and provide valuable services. (Source: LG-MRI)





The BoldVu Smart Point can do more than display information. Its environmentally sealed electronics chassis houses multiple high-performance computers and comes equipped with its own power center and thermal management system.

The BoldVu Smart Point provides the solutions needed for deployment at the edge—a clean, climate-controlled, and powered environment. For example, a Wi-Fi router can turn a kioskinto an Internet hotspot, and sensors can enable environmental monitoring. A Smart Point can also house cellular radios to augment wireless network coverage.

For all of these use cases, the BoldVu Smart Point offers an end-toend platform. Data and analytics at the edge enable myriad insights for environmental awareness, traffic and pedestrian analysis, and city service optimization. Remote, centralized management happens in the cloud server, where metrics can be further analyzed. This all adds up to significant business benefits and opportunities. "We have over 40,000 actively deployed LCDs across public and private venues."

Eric Hornsby, VP of Sales at LG-MRI

Purpose-Built Inside and Out

LG-MRI designed its displays around Intel® technologies, enabling features such as:

- Unparalleled image quality in even the most challenging outdoor environments.
- A thermally controlled, environmentally sealed and powered chassis for deploying connected technologies at the edge.
- A proven system architecture that delivers edge computing, connectivity, data collection, and analytics.

BoldVu Smart Points are built to last, which means low cost of ownership. They have the industry's only visual-performance guarantee—10 years of 24/7 use in any outdoor environment—with zero loss in luminance. And as technology improvements become available, the Smart Point modular design means that internal components can be readily swapped out or upgraded to deliver new applications.

Engaging Events

High-visibility display technology creates winning experiences for sporting fans and other event-goers. On these big, bright displays, content can incorporate exciting elements, giving the feeling of entering a different world. Plus, content can be tailored to the experience of each visitor. Video and analytics, as well as social media and mobile communications, can personalize fan interactions.





One example is ONE Daytona, with a BoldVu Smart Point network recently deployed by ISMConnect, a leading digital product and services provider. ONE Daytona is Daytona Beach's premier destination for retail, dining, and entertainment.

The network includes more than 20 BoldVu 75" displays and touchscreen kiosks (shown in **Figure 2**) across the venue. They not only provide wayfinding and brand messaging, they also use cameras to process video data and deliver targeted on-screen experiences.

Video analytics provide the venue with actionable insights that empower tenants and sponsors, while enhancing site security.

"These screens provide a platform to modernize the way visitors experience events, brands market their products, and venues deliver experiences worth reliving," remarked ISMConnect VP of Marketing Brian Becker. The ONE Daytona development has proven both the utility and ROI of BoldVu Smart Points.



Figure 2. LG-MRI kiosk at ONE Daytona in Daytona Beach.





Executive Brief insight.tech

Better Together

"LG-MRI is a joint venture between LG Electronics, well-known for their broad portfolio of consumer electronics and home appliances, and Manufacturing Resources International (MRI)," explained Eric Hornsby, VP of Sales for MRI. "The BoldVu product is recognized as a premier solution for LCD-based street furniture applications. Today, LG-MRI has 40,000 active deployments across public and private venues."

Intelligent displays such as the BoldVu Smart Point are unlocking the potential of some of the most ubiquitous fixtures in the urban landscape—helping governments make their cities better places to live, work, and play.

Intel and the Intel logo are trademarks of Intel Corporation in the U.S. and/or other countries. © 2018 insight.tech. Sponsored by Intel®. Trademarks: www.intel.com/content/www/us/en/legal/trademarks.html



