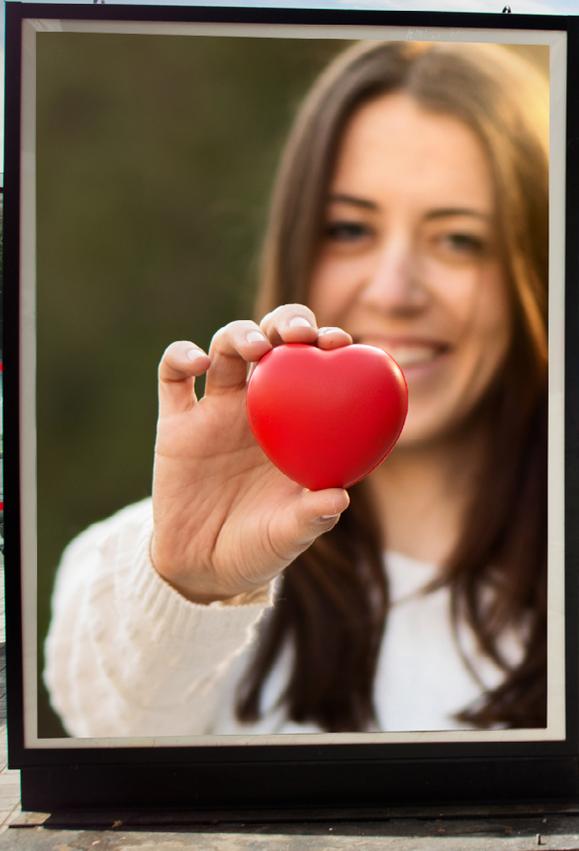


WHITE PAPER



Outdoor-Ready Tech Offers Growth Opportunities



Outdoor digital signage is demonstrating its worth, but it takes technology designed for use in a wide range of conditions to ensure that signage operates properly.

By Richard Slawsky | Contributing writer, Digital Signage Today

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Although the overall digital signage market continues to develop and expand, there's one area where growth promises to be particularly strong: outdoor signage.

According to projections by Global Market Insights Inc., the overall digital signage market is expected to grow by 5.2 percent through 2023. And an increasing component of that is outdoor signage, including for uses such as drive-thru menu boards, signage in transportation centers such as train stations and airports and vehicle signage such as those placed on the side of buses or taxis.



But several factors must be considered when placing displays outdoors. In an indoor environment conditions such as temperature and humidity are relatively stable. When placing signage outdoors, though, conditions can change radically. Temperatures will vary significantly throughout the year, rain will fall, winds will blow and humidity levels will change.

So when placing signage outdoors, special attention must be paid to environmental concerns to ensure the deployment stays up and running.

Taking its place

Although digital signage has long been a feature inside QSR and fast-casual restaurants, the environmental challenges of placing a digital display outdoors means many drive-thru lanes still feature a static display. But that's changing with the introduction of enclosures designed to withstand the elements.

In addition, restaurant operators are realizing the value of replacing static drive-thru menu boards with digital displays. A study of the impact of digital outdoor menu boards conducted by Forrester Research, commissioned by display maker Samsung, found that the addition of those boards in test locations increased drive-thru customer traffic volume by 9.1 percent and decreased drive-thru wait times by nearly 6 percent.

Those boards also increased the conversion rate on promotional items by 2 percent, resulting in an uplift in profitability for the stores included in the study. Customers were also more likely to add additional items to their orders, such as fries and beverages, when ordering at a drive-thru with digital menu displays.

And by moving to outdoor menu boards, the restaurants in the study eliminated printing costs associated with static drive-thru menu solutions and reduced the labor costs associated with updating those boards.

But the opportunities for outdoor digital signage deployments don't stop there. Anyone who's visited a large city, or even a smaller one, has likely seen static posters on the sides of buses and lighted static signs mounted on the top of taxicabs. It's even becoming a common marketing tool to mount a sign on the bed of a truck and drive around town to promote a new restaurant, retail store or entertainment venue.



In recent years, though, those static signs are being replaced with digital displays. Unlike static signage, vehicle-mounted digital signage can incorporate full-motion video, can be updated instantly, can incorporate multiple rotating ads, can change based on factors such as the time of day and can leverage geolocation technology to change content based on the vehicle's location.

A taxi located near a movie theater, for example, can display an ad for the latest movie, while a transit bus running a route that takes it by a new restaurant can be programmed to display ads for that restaurant.

And digital signage is increasingly becoming a part of transportation facilities. New York City's Metropolitan Transit Authority, for example, has deployed 370 On the Go digital signage kiosks in subway stations and train stations to serve the nearly 1.8 billion people who ride its subways each year. The kiosks deliver information such as train arrivals and weather alerts. Commuters can also look up information on routes, wayfinding and local restaurants. Advertisers can also purchase space on the kiosks.

Addressing the need

To help meet the challenges involved in deploying digital signage outdoors, a number of companies have introduced display enclosures that are designed to withstand the elements, including protection from dust, rain, vandalism and extremes in temperature and humidity.

But while a key part of expanding the opportunities for outdoor digital signage has been improvements in those display enclosures, there's a component of an outdoor deployment that often gets overlooked: the media player. A dependable media player that can function in a wide range of environmental conditions is critical to making that deployment a success.

To address that concern, companies are introducing media players that can stand up to the rigors of outdoor use.

IBASE Technology, for example, recently debuted its SE-102-N, an ultra slim signage player that measures only 19.5mm thick. This media player enables the retail, food and hospitality segments to deliver compelling and valuable content in dual high-definition HDMI displays to targeted audiences.

The SE-102-N digital signage player has been tested to pass extended operating temperatures (-40°C to +70°C) and meet extreme system reliability requirements that allow its deployment in a wide range of harsh indoor and outdoor environments. The fanless unit features a lower-power, high-performance, Intel® Atom™ x7-E3950 @ 2.0GHz quad-core processor with a built-in Intel® HD Graphics. It has two dual channel DDR3L-1866 sockets to provide up to 8GB memory and an optional 64GB mSATA SSD for faster system boot and low heat emission.

The SE-102-N's super-slim chassis can fit into the tightest spaces behind displays and offers an array of connectivity options including a Gigabit Ethernet, audio, USB 3.0 ports, and two HDMI interface supporting 4K UFD resolution. Powered by a 60W adaptor, the SE-102-N also has a Mini PCI-E slot for optional WiFi, Bluetooth, 4G and capture functions.

The SE-102-N has two HDMI outputs together with independent audio output support, as well as built-in hardware EDID (extended display identification data) simulation to prevent screen convergence problems and issues due to cable disconnection or failure to identify EDID. It comes with IBASE's unique iSMART intelligent energy-saving technology and the Observer monitoring technology that support automatic power on/off scheduling, power automatic recovery, low temperature boot protection and hardware monitoring.

About the sponsor:

Focused on the design and manufacturing of industrial PC products, IBASE Technology Inc. specializes in single-board computers, industrial motherboards, CPU modules, embedded systems, network appliances and digital signage systems for different applications in the gaming, entertainment, automation, medical, military, networking, signage and security markets.

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