



Digital signage is a rapidly growing sector of the sign industry. **Sophie Jones** roots out the industry experts on the technologically advancing hardware that is powering this market



As the signage industry advances onwards and upwards, the growing influence of digital signage is hard to ignore. From the smallest advertising screens the size of iPads, to the largest digital out of home (DOOH) campaigns in London train stations, the sector is really taking root and screens are becoming more and more of a common feature alongside traditional wayfinding and shop signs.

Although there is no need to think that a traditional static signage company needs to start throwing all its resources into a new electronic hardware wing, nonetheless, the companies that do not consider that customers' needs may be best served by digital signage could very well be missing out on crucial and lucrative business. Also, as industry across the board becomes more digitised, a move to providing digital signage as an extra

service may make more financial sense than anticipated.

Moving into mainstream

Janice Fairfield, managing director of digital signage supplies distributor, Fairfield Displays and Lighting, concurs, saying: "Digital signage is becoming more and more mainstream. As all artwork is now digital, it is a natural step to put images onto screens, and sign companies are becoming more comfortable using the technology. As network systems have come down in price and wifi is available in the majority of outlets, more customers are going down this route."

However, the first move is to identify what kind of signage your customers may be looking for, in terms of the actual nuts and bolts hardware; size, resolution, and the application required of the digital screen. Fairfield

It is hard to ignore the vast amount of digital signage that has made its way into our everyday lives, even in our retail experiences

has noticed that advances in digital signage technology are happening all the time, which can often throw up the ideal solution to a customer problem.

For example, she says: "There has been a major improvement in the brightness of screens for use in windows. In the past standard screens were 450 to 500nits (a unit of luminance equivalent to one candela per square metre) designed for standard commercial 24/7 use, the LG Shine out screen at 700nits has also been a good option and excellent value in the past. But screens are constantly getting brighter and the prices are coming down."

Fairfield continues to say that, in order to keep up with customers' ever advancing needs—such as digital signage that supports both outdoor and indoor applications—the company has continued to invest in varying ranges of digital signage screens, from various

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high-end digital hardware providers.

She says: "Fairfield now has a 32" 1,500nits screen which is a useful size and a lot cheaper than the larger screens. From September Samsung will be launching 24" screens which will be available at 1,500nits bright, while 40" screens of 2500 are already available. It is not only the hardware that is changing; the software is also getting much easier for people to use.

"In addition to the interior screens, we now have a range from 32" that have been designed to use outdoors. These screens are completely weather proof and will open up a totally new market for using digital signage. The screens are 1,500nits bright and look like large tablets.

"Currently the most popular screens are the Peach Media Players and Peach Smart Screens. These screens are available from 19 up to 55" and come with their own software packages. The units are between 450 to 500nits bright and are ideal for all internal use, and for displaying images after dark in the windows. It is an attractive screen that looks like a large iPad."

As digital signage becomes increasingly interactive, says Fairfield, she



fairly flat panel display solutions, including a range of digital signage options, from video walls and TFT LCDs, to touch screens and translucent displays.

Crystal Display Systems is keen to point out the various different markets digital signage can cater to, and its specially created screens take into account the idiosyncrasies and needs of each market, as well as general important factors, such as ease-of-use and management, high quality display,

Fairfield Displays and Lighting's Peach Smart Screens are the most popular in the range, and are used here in a chemist

monitors come unbranded and have unrivalled brightness and contrast for striking advertisements due to the LED backlit technology. In an intelligent technological addition, which is starting to appear on many digital signs, the screens feature an ambient light sensor, which automatically adjusts brightness to reduce power consumption and costs, as well as optimising readability.

"As well as having a range of AV inputs, these displays also have built-in high-definition media players that allow you to run content directly from a USB drive," continues Bartram. He adds: "Load your pictures and videos onto a USB memory stick then insert this into the display. The screen will then start playing the pictures and videos in a continuous loop."

Another media addition, which adds a new level of interaction for the public, is the inclusion of a pair of integrated slim-line speakers on the flat screen. When combined with other screens as part of a tiled video wall—using a built-in matrix processor—this creates a sharp and engaging video and audio experience.

Bartram concludes: "These displays feature a powerful interface supporting a wide range of audio and video inputs such as HDMI, VGA, DVI, RGB/HV and YPbPr and also include secure industry-standard BNC connections."

Catering to a not-so-niche market, another recent addition to Crystal Display Systems' arsenal is the Slimline Free Standing Digital Advertising Display, which is a standalone digital advertising solution combining the latest LCD display technology and HD media players.

The commercial grade, extra bright LCD panel allows the screen to be in constant use, with a wide viewing angle and no visible buttons, controls, or branding on show which prevents distraction from the message or advertisement displayed. The screen also features a tempered glass face, rounded corners, super-slim profile, and aluminium surround to create an attractive, 'tablet-like' exterior.

The benefit of using a digital screen with an inbuilt media player is in the simplicity of installation and the relative ease of passing the running information over to the customer. As the company says, the freestanding screen can be updated simply by using a USB memory stick.

To run your customer's advertisement on the screen, it says: "Load your pictures and videos onto a USB

Factoid: The Digital Signage Federation, the Digital Screenmedia Association, the Digital Place-based Advertising Association, and OVAB Europe are some of the non-profit industry trade groups representing firms and professionals in the digital signage market.

sees that smaller digital signage screens in particular will benefit from advancing technology, as the advertising and retail industries begin to wake up to the opportunities and flexible applications of interactive screens.

However, even with all the above options, Fairfield warns sign-makers to treat each customer as they would one asking for an interior printed banner or an outdoor Dibond sign, saying: "The most important thing to consider is to get the brief correct in the right place and not just go for a cheap screen. The screen that you use in a window will be totally different from a screen used in the interior."

Crystal clear signage

Another company on the block keeping ahead of the game in terms of digital signage hardware is Rochester-based Crystal Display Systems. The company designs, distributes, and resells speci-

and running costs. For example, its latest range of low-cost LED monitors have been specifically designed to help casinos and gaming operations promote themselves.

The low-cost LED screens feature a narrow bezel, a built in media player, and HDMI inputs, and are available in sizes from 32 to 82".

"We introduced these monitors at a low cost directly from stock so there are no delays plus these units are very cost effective," says Chris Bartram, managing director for Crystal Display Systems, who continues: "Unlike standard monitors, these units come with built-in commercial media players that allow users to update content locally, which saves on expensive networking and maintenance. This results in a very cost effective and easy-to-use solution."

Proving that Crystal Display Systems has taken into account the specific market these screens cater to, these



The Slimline Display from Crystal Display Systems is a standalone digital advertising solution combining the latest LCD display technology and HD media players

memory stick then insert it into the display, which will copy the files into its internal flash memory. Once you remove the memory stick the screen will then start playing the pictures and videos in a continuous loop.”

In addition to the simple running, the company goes on to say that the Slimline Freestanding Digital Posters come with free scheduling software, allowing a company to display different content at different times of the day. Image display durations and transition effects are included for further customisation.

Bartram continues: “For example, a restaurant can create three daily schedules; the breakfast menu in the morning, lunch menu in the afternoon, and the dinner menu in the evening. If you prefer to keep it simple you can update the screen directly without using the software.”

There is an additional option to display a ‘ticker tape’ style scrolling message to highlight promotions or offers. Finally, the screen features an eco-friendly power timer to control when the sign is on or off during the day or week, meaning energy is not wasted when the screen does not need to be on, and running costs are drastically cut.

A spoonful of sugar

Amscreen is a rather more globally-known name in the signage world. This might have something to do with its managing director, Simon Sugar, being the son of global entrepreneur and TV personality Sir Alan Sugar. Celebrity status aside, it is still unsurprising that the company’s focus on simplicity, and cost-effective digital signage solutions has made it a well-known name and product in the digital signage market.

Amscreen can boast over 6,500 digital screens worldwide, with well-known clients from Tesco to BP and WH Smith, which is impressive when



Amscreen’s client Garmin installed a number of screens to improve its employee internal communications

you consider its portfolio consists of only four screens in different sizes—the 24”, 40”, 40” display unit, and 70” outdoor screen—all of which feature the company’s unique plug and play solution, with no additional Wi-Fi set up or wiring required. Following a partnership with Sharp Devices Europe, Amscreen has also jointly developed a new high bright LCD module, featured in each screen.

Working on Fairfield’s advice that you let the brief or environment dictate the screen, Amscreen has simplified

Amscreen also offers a range of customisation options allowing each client to make the most of their screens, manage the network, generate additional revenue in otherwise unused space, and receive unique audience analytics.

The beauty of Amscreen’s solutions is in their simplicity and flexibility, with the ability to be used in a variety of sectors such as retail, automotive, hotels and healthcare. They also cover varied applications, from digital menu boards and posters, to digital point-of-purchase fixtures, and employee communication screens.

For example, Garmin is one of Amscreen’s biggest customers, and recently invested in a number of screens to overhaul its employee communication.

Paul Atherton, commercial director of Amscreen’s digital solutions, comments: “So what we’ve done with Garmin is put screens in place that operate over the mobile phone network. Therefore there’s no need for hard wiring or wifi. We plug our products in and that makes them really simple to operate.

“We’ve also created a number of templates for Garmin. What that allows you to do is have local access at a management level to even celebrate things like birthdays and give recognition to

“ It has been a fantastic tool in terms of communicating with staff ”

Amscreen offers four digital signage screens up to this 70” outdoor screen, which can be positioned both horizontally and vertically

screens down into general environments where they might be suited. For example, the DS24 is the smallest available screen, offering what the company terms an ‘up close and personal’ feel, which Amscreen says is most suited to interactive environments, such as retail stalls, banks, and hotels.

The DS40, however, is more suited to larger environments for maximum impact. With the added benefit of being able to operate horizontally or vertically, the screen is better seen in larger retail outlets, entertainment arenas, gyms, and restaurants. The DS40 can also come in a tough display unity for high traffic areas such as cinemas or supermarkets.

Finally, the DS70 is Amscreen’s first outdoor ‘weatherproof’ screen, which can display live content, suitable for sports stadiums, transport stations, and shopping centres, for example.

employees on a local basis.”

Speaking in an interview, Garmin’s director of human resources, Gary Morgan, says: “The main benefit we’ve received is that staff are actually reading this information. When we put dates on the screens, employees contact us and they ask questions about things that we’re putting on.”

Though the world of digital signage may seem fast-paced and ever changing, it could be thought of as a blessing, for each new development seems to move these well-built digital signs closer to becoming perfect solutions to any customer’s query or need. Just as technology in the static sign-making industry has been improving, so digital signage will seemingly continue to become simpler to use, cheaper to purchase, and more effective to a customer who is willing to make that commitment to purchase. All it needs is a sign-maker to take on the challenge.

