

Installation

INTERNATIONAL AUDIO, VIDEO AND LIGHTING INTEGRATION

February 2013



Audio networking – still MADI after all these years **p22**



Smart buildings – the next frontier for AV integrators? **p28**



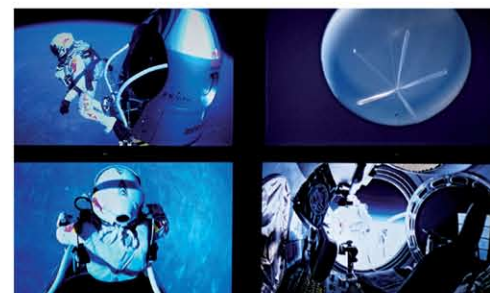
Show preview – our second major look at ISE 2013 **p38**

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WHEN IT REALLY MATTERS...

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Tiles, such as these from eyevis, lend themselves to a broad array of creative deployments in the retail environment



[KEY POINTS]

➤ If digital signage is about delivering information, AV in retail is increasingly about delivering an experience

➤ Innovations such as tiled images, holograms, transparent displays, touch tables and interactive walls are building on the success of digital signage

➤ Atmosphere and ambience – both video and audio – are what high-end retailers and brands are looking to create in their stores

➤ While AV technology is being used to lure people away from internet shopping, for many retailers and brands, bricks and mortar and the web are complementary

➤ AV technology can – almost uniquely – deliver the in-store interactivity that allows retailers and brands to create one-to-one relationships with consumers

Rising to the challenge

‘Bricks and mortar’ retailers are using AV technology to help stem the flow of consumers towards web-based shopping. **Ian McMurray** finds out how they’re doing it

THOSE WHO trace the threat to ‘bricks and mortar’ retailing to the ubiquity of internet access are perhaps mistaken. There is a case for saying that the threat first emerged in 1977, when a US talk radio show host sold 112 can openers to his listeners in an hour. The radio station owner sensed an opportunity, going on to found the Home Shopping Network – which in turn spawned an entire industry. What bricks and mortar jeweller could compete with diamonds as big as a TV screen? Which high street store could present a set of saucepans in such excruciating detail?

There is, though, little doubt that the internet is proving a much more significant threat. Retailers and shopping centres are, however, fighting back.

“The growth in multimedia, web and mobile technologies in recent years has made it almost compulsory for many retailers to venture into this arena,” says Richard Edwards, senior consultant at retail design consultancy Javelin Group. “So many more customers now have a wide choice in the ways in which they can engage with a retailer that not to offer that choice may leave them soon lagging behind the competition.”

TREMENDOUS GROWTH

“A recent review of high street and out-of-town stores has shown a tremendous growth in the amount of multichannel hardware visible in-store,” he continues.

“There needs to be a reason to enter the physical store and AV technology can



‘I think we will see a big growth of intelligent control solutions within AV in retail for 2013’

Steve Scorse, Prysm

certainly support that effort,” notes Steve Seminario, senior product marketing manager for Planar Systems. “The use of digital displays in retail is typically designed to attract traffic, communicate brand, create ambience, engage shoppers, articulate an offer. Implemented successfully, any of those five uses enhances the physical store experience.”

It’s important to understand: AV technology in retail is more – much more – than digital signage. Digital signage is – mostly – about communicating factual information.

“The focus of in-store signage is no longer just functional for directing or advertising,” says Steve Scorse, vice president EMEA for Prysm, whose installation at Burberry’s flagship store in

London is widely recognised as being a key element in a store that has done more than most to leverage AV technology (see case study, page 18). “Branding is now seen as a separate function to digital signage. It helps to create the experience, giving a sense of arrival and reinforcing brand values to consumers when they are in the retail space. We now need to create experiences which give something extra and create a talking point which can spread through word of mouth, social media and PR.”

“Some of the most innovative uses of AV technology in retail centre around the use of displays as integral parts of the space – almost as a building material,” continues Seminario. “Other innovative uses take

advantage of the inherent flexibility of digital displays – now it's informing me, now it's making an offer, now it's entertaining me, now it's part of a co-ordinated branding experience running across the entire store, now it's part of the store infrastructure."

EXPERIENCING THE BRAND

Increasingly, retailing is about the brand – and the brand experience can be difficult to convey via a simple PC screen, something that switched-on retailers are recognising. Helping create the brand image is a challenge for AV companies. Accurate colour reproduction, for example, is much more important in branding than it is in digital signage – a point made by Scott Pickus, marketing manager at DynaScan, whose company has developed displays specifically for the retail environment.

"We've paid special attention to colour quality," he says, "ensuring that our displays deliver a true white. All of our high-brightness LCDs are individually colour calibrated to the D65 colour standard which has a colour correlation to natural daylight." He also notes that the retail displays designed by DynaScan feature high brightness and 24/7 operation capability.

It's not just about video. Audio too has a key role to play in creating 'the brand atmosphere'.

"The requirement we most frequently see is for high-clarity room-filling sound with even sound pressure to create an ambience appropriate to the brand," says Babs Moore, sales director at Amina

THE MOST ADVANCED USE OF AV IN RETAIL IN THE WORLD?

Burberry's London flagship store is housed in a 200-year-old listed building on Regent Street and, at 4,400sqft (410sqm), is the largest Burberry brand experience in the world. It opened in September 2012.

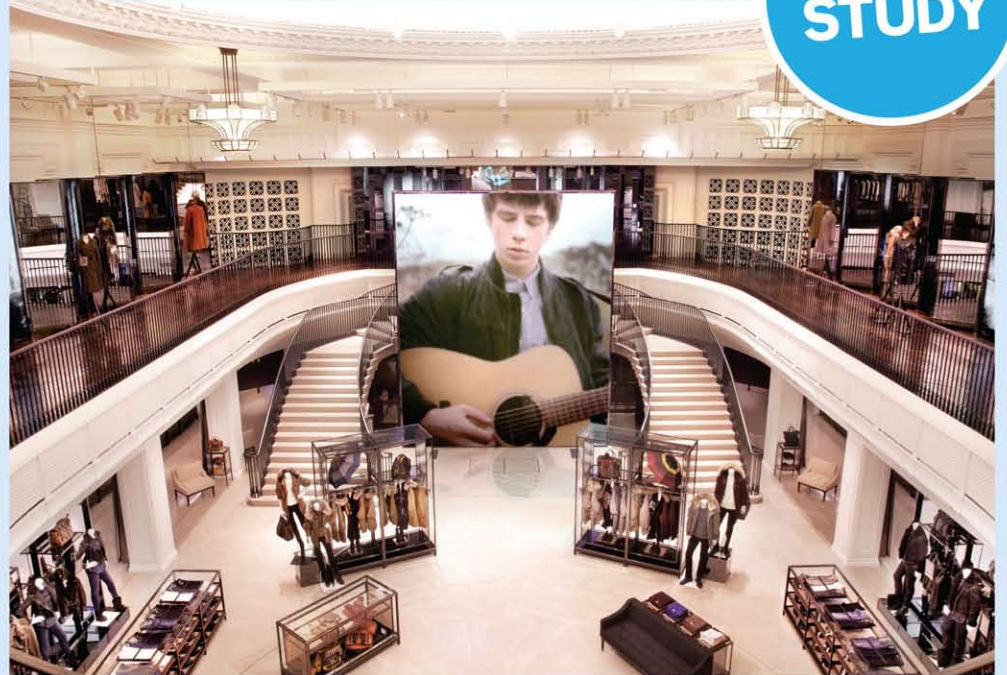
Technology has been woven throughout it, and the company says that it will become a space for experimentation in technology. It is designed as an immersive audiovisual experience, with almost 500 speakers and 100 screens intended to engage customers through emotive brand content. It features the tallest indoor retail screen in the world – 6.9m high and 38sqm – using over 190 panels of Prysm's LPD (laser phosphor display) technology.

RFID features in selected apparel and accessories, triggering bespoke multimedia content relevant to the products, while mirrors turn instantly to screens with runway footage and exclusive

Technologies. "In such places, it is unusual for the music to be played particularly loudly, but an even ambience is important. Amina Invisible loudspeakers are designed for locations where aesthetics are key, and ugly 'dinner plate' ceiling loudspeakers impact the design in an unacceptable manner. Amina retail customers are typically those focused at the very high end of the market where aesthetics are a key part of the experience."

INNOVATION

More and more, it seems that AV is being designed in to stores, rather than bolted on as an afterthought – and AV



video. Satellite technology enables the streaming of events into the store. Applications on iPads carried by store associates provide

purchase history and customer preferences to enable a tailored shopping experience as well as a link to burberry.com for access to worldwide stock.

The new shop is designed around the brand's website and has rooms that mirror the different sections available online.

applications are becoming more innovative.

"We work on a lot of bespoke projects, so a brand and their agency will approach us with a concept and we will work alongside them to technically deliver it," says Neil Manwaring, sales and operations director at integrator Arcstream AV. "Recently, we worked with Vauxhall to produce a screen on rails which revealed the interior of the car as it moved past each part of the vehicle. We have created a huge touchwall which lit up a whole Sony store in the correlating colours to the laptop which was chosen by shoppers in Manchester."

"Retail theatres are a new trend that we are seeing start to emerge, particularly within the automotive and high-end fashion sectors," adds Score. "No products are on show within this space, so the focus is on interactive technologies to create the experience and gain people's interest, with products being shown later in the journey. I think we will continue to see a rise in interactive displays being used to create a sensory experience which can also extend the consumer journey by linking with an online strategy."

"The important thing, and what we always try to do, is to understand what the

customer is trying to achieve," points out Chris Bartram, managing director of Crystal Display Systems whose retail product range offers transparent displays – including displays for food/drink retail refrigerator glass doors – battery-powered displays and shelf-edge displays. "It's got to be about more than just novelty value."

"Transparent" seems to be catching on: Bartram notes that such displays have been used by Harrods, Casio and Nike among others. "Our EYE-LCD transparent displays are ideal for retail environments, because they can be used to combine digital information with real-world objects," says Eric Hénique, director of

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marketing and international sales at eyevis. He goes on to note the creative possibilities offered to retailers by his company's omniSHAPES and squareTILES which allow images of almost any size or shape to be created.

Other AV innovations for the retail industry include Comqi's delayMirror, a 'video mirror' that provides a continual delayed video feed which enables shoppers to see themselves as they were three seconds ago, allowing them to twirl and see the clothes they are wearing from all angles in a dressing room. Importantly, it gives customers an experience they can't get online.

Fashion retailer New Look recently launched what it calls an "augmented retail experience" at its Marble Arch, London store, in which the Blippar mobile phone image recognition app is used to allow consumers to interact with model Kelly Brook's new range of cosmetics. The concept is expected to roll out to over 700 stores across Europe.

New Look is a perfect example of how the holy grail for retailers and brands is to engage consumers, to interact with them and to create something close to a personal, one-to-one relationship. Now, consumers are not being advertised to – they're being communicated with. Here too, AV technology is playing a key role.

"Interactivity is an important element of data

capture, increasing social media reach for brands and it helps to create a real physical link with the consumer which strengthens brand recall," says Arcstream's Manwaring. "It also enables you to record consumer choices and then use this to improve uptake, range or your retail strategy for the future."

CREATING RELATIONSHIPS - AND BUYERS

"I think we will see a big growth of intelligent control solutions within AV in retail for 2013," adds Prysm's Scorse. "RFID is one particular method which is already advancing and being used to

track movements around the store, identify which items made people stop, what they viewed and for how long. This will develop into more advanced ideas along with data capture in other forms to build a profile of the person such as age, ethnicity and body shape, so personalised recommendations can be made alongside the style choices they make in-store."

In other words: interactivity isn't just for fun or to entertain consumers. Done right, it can directly influence shopping behaviour – and capture information that makes it possible to create,



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'The more interest that is created using AV technology... the higher the chance for the shopper to buy'

Scott Pickus,
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not just a customer, but a loyal fan. And, as eyevis's Hénique points out, customers don't come to a store to watch promotional videos.

WORKING TOGETHER

The fact is, however, that while web-based shopping and store-based shopping may appear to be competitors, for most retailers and brands, the two are complementary rather than mutually exclusive. "Most retailers have both a physical presence and a web presence," says Edwards. "The technology enables them to share those environments between each other, where the store can promote range and product information from the internet and web-based customers can be given the choice of buying online and collecting from a store near them, at a time that suits them."

"Increasingly, shoppers bring the online experience into the store with them on their phone," points out Seminario. "But there's a reason they're in the store and not just online. Leading-edge retailers are exploring ways to maximise the useful interplay between those handheld digital devices and the physical store shopping experience. A key piece of those leading-edge solutions is the in-store digital displays and AV infrastructure that facilitates bidirectional communication between the shopper's device and the store."

But for as long as retailers have stores – even if they have a strong online presence – they need to encourage a steady flow of



Bag and luggage company Tumi installed a 55in DynaScan D555LT6 screen in the window of its Fifth Avenue, New York store, with three 47in screens behind the counter

consumers into them. "Bricks and mortar retailers are being forced to adapt to the online shopping experience to keep their customers," says DynaScan's Pickus. "The majority of people will buy when the product is presented in a unique way, which excites them into the purchase. Retailers can use

AV technology in several ways including brand building, elements of interactivity, and attention-grabbing features to create an environment that people want to go to. The more interest that is created using AV technology that allows customers to touch and feel the actual product, the

higher the chance for the shopper to buy."

"Retail therapy" is a tongue-in-cheek description of the pleasure that many get from shopping. With the help of AV technology, that experience is unquestionably being revitalised, bringing consumers back into stores and, most importantly,

helping to increase sales. ■

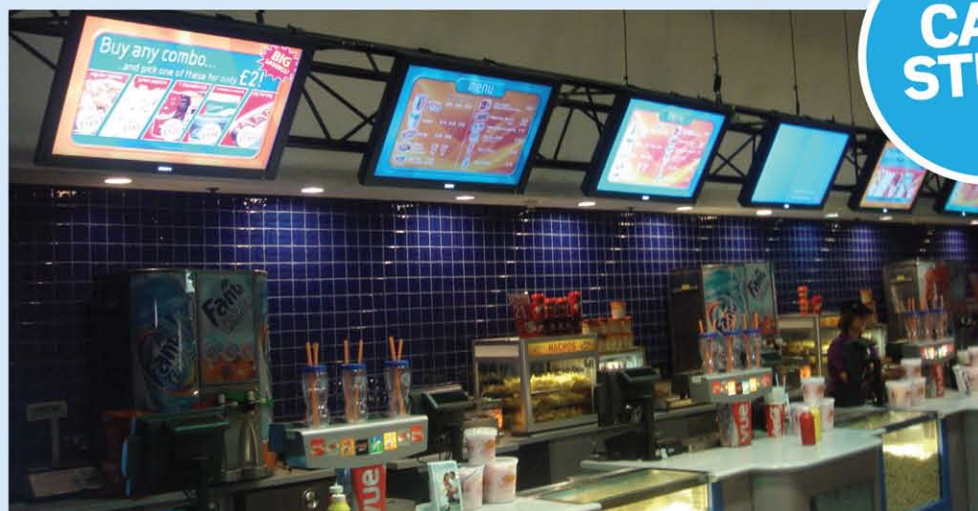
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SONY SCREENS ENHANCE THE VUE FOR UK CINEMA CHAIN

Sony Professional Services has transformed and enhanced the retail offering and customer experience of Vue's network of 65 cinemas across the UK by installing 287 Sony Bravia and Sony Pro 40in LCD display screens linked with the company's Ziris digital signage software.

Vue needed a system that would allow it to control content centrally within each cinema site while being flexible enough to allow different cinemas to show different content from each other.

Sony designed a solution for Vue using Ziris software, hosted on three powerful servers at the cinema chain's London headquarters. This



allows the office to create, manage and transfer content to the Bravia and Pro 40in LCD

display screens across the Vue network. Sony is also installing

FWD40LX2 HD screens in the foyer designed for heavy-duty operations in public places.



The display panel also allows for independent colours to be fine-tuned so a precise match with the branding colours can be achieved.

Roland Jones, IT director, Vue, says: "The beauty of Ziris is that we can chop and change and do what we like whenever we want from head office. We can change displays during quiet periods and busy ones to reflect different demographics and operate all functions from a single point. Promotional activity or information can be scheduled to target key times at all cinemas – all on a daily basis."

FEATURE: AUDIO NETWORKING

intensive upgrade work.

"Digital audio distribution alongside LAN traffic eliminates additional infrastructure costs, and widespread cable routing is now the norm," says Beretta. "A host of new networking technologies is bringing audio-over-Ethernet to a new level, using standard IP protocols and pioneering the AVB set of standards."

Despite suffering from what is currently perceived in some quarters as a shortfall in availability of compliant products, the AVB (Audio-Video Bridging) project that involves the creation of standards for audio-over-Ethernet delivery is still generally expected to bring unprecedented uniformity to this area of networking.

THE FUTURE?

Until such a time, individual approaches to the audio-over-IP debate are continuing to prosper, with two in particular widely perceived as successors to MADI. From Australian manufacturer Audinate, Dante is able to deliver 1,024 or 512 bidirectional

channels at 48K/24-bit or 96K/24-bit, respectively, over Gigabit Ethernet.

Then there is Ravenna, developed by Lawo group company ALC NetworX. Although promoted most firmly towards broadcast – where its ability to operate without dedicated switches is felt to make it particularly conducive to integration into complex existing infrastructures – there are also potential applications in live and other parts of install. Once again, there is a significantly increased channel count; there are no specified limits with Ravenna, but with a typical Gbit LAN it is possible to run up to 500 audio channels at 24-bit/48kHz.

Specific details of the various approaches to audio-over-IP do vary but, suggests Beretta, "they have more in common than you might expect, and the ultimate goal of interoperability is not far away".

In advance of that no doubt glorious day arriving, there will be plenty of sympathy with the opinion voiced by SSL's Duffell, who appears to favour caution

until there is a thoroughly ratified and "widely supported open standard for alternative approaches to high channel-count audio distribution". He adds: "Particularly in broadcast, users need to be able to combine technology by different manufacturers in a simple and practical way, and at the moment other approaches still don't really match MADI in that way."

Every protocol has its day, of course, or as Beretta opines, "standards shift into legacy status gradually over time". But, in an uncertain period, MADI is unquestionably reliable, and for that reason – 'second coming' or not – its short-to-mid term future is assured. ■

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