

AV MAGAZINE

Retail Special

Developments in: retail experiences, the Internet of Things ecosystem, RFID, behind-the-scenes intelligence & digital content

As demand for AV in the retail market continues to grow, Peerless-AV says that brands must find new ways to stand out in a conjected market

Unicol's digital signage and mounting expert Rachel Hunt know what's required for successful AV deployment in retail



AV surfs the retail

As the retail market continues to evolve at speed as buying habits change, **Rob Lane** investigates how and if AV can keep pace as online, mobile and in-store barriers disappear.

According to a survey conducted for law firm TLT's Retail Growth Strategies Report 2015, published in January, more than half of the 100 top UK retailers planned to spend more on technology this year than they did in 2014. No surprise perhaps, and no surprise that two of the most popular areas of investment were expected to be websites/mobile apps and improving IT systems, with improvements ensuring that different systems communicate with one another also key.

Whether or not these predicted investments were carried through this year is a moot point, but it's clear that UK retailers are tuned in to the fast-paced changes in consumer requirements that continue to inform and evolve the retail experience, with the Internet of Things (IoT) high on the

agenda and an increasingly elastic dynamic between bricks and mortar and online retail outlets.

This is a market that – like its corporate AV cousin – offers huge opportunities for technology and content providers and facilitators. Indeed, according to another UK-based survey, by Juniper Research, retailers are set to spend \$2.5 billion worldwide on IoT-related technologies by 2020 – approximately four times more than the \$670 million that was predicted for 2015.

Juniper Research's study states that retailers are at the cutting edge of the Internet of Things' impact on businesses, with many looking to create IoT 'ecosystems'. The use of Bluetooth-equipped beacons and radio frequency ID tags RFID tags to push relevant information to customers through smartphones and other mobile devices, alongside realtime asset tracking and pricing adjustments, gives retailers a competitive edge, said the survey.

According to Juniper, leading retailers using the IoT to generate an 'ecosystem' will "gain market advantage" with "in-depth business insight and an enhanced customer experience".

Steffen Sorrell, a Juniper research analyst, adds: "Retailers such as Zara and Target are already taking advantage of the benefits offered by RFID asset tracking. Meanwhile, the beacon industry is expanding rapidly, used as a method to provide consumers with contextually relevant information in conjunction with their smartphone or wearable will enormously enhance the in-store experience."

Suppliers and integrators of AV technology are advised to pay heed to the winds of change sweeping through retail, ensuring that their solutions dovetail with Internet-connected devices that support data gathering.

"Things will complicate as the focus shifts further from hardware to software, content and data analysis," says Frederik De Wachter, product marketer and co-founder of DOOHapps, the interactive application store for the Digital-Out-of-Home industry.

He adds that global display manufacturers, for instance, will simplify their offer with smart screens that run on industry standard

operating systems. "As with smartphones and their app stores, it will create a perfect eco-system for fast innovation in a thriving market."

De Wachter anticipates a near future where, as online and in-store barriers disappear, 'wayfinding' and local outdoor advertisements will "lead shoppers to the right location", whilst interactive windows signage pulls them into store.

"Audience measurement software and Wi-Fi tracking will show the digital store manager how effective the display window is in getting passers-by to come in. Beacons, smartphone apps, Wi-Fi tracking and audience measurement will gather realtime data to guide the customer and adapt content dynamically to its current audience."

IT'S ALL ABOUT THE EXPERIENCE

Retailers, of course, wish to create a seamless, integrated experience between online, mobile and in-store – a "consistent 'look and feel', achieved through coordinated digital media, reinforcing brand value and supporting a follow-through engagement", according to Terry Wilson, commercial director at AVMI.

This desire to create an integrated experience is at the heart of retail's new dawn, a seamless connected journey for customers, from Internet, to mobile, to social media, to in-store.

"Digital can bring the brand to life in-store and provide a seamless connected experience for customers," explains Aisha Nanor, head of music and digital initiatives at creative production agency, Kaleidovision. "It's all about an integrated experience, so that messaging, objectives, design, current culture is all aligned."

Of course, it's the customers, as much the retailers themselves, who are the architects of this change. Consumers' shopping habits have been permanently altered by Amazon in particular, and although this change in our collective retail therapy MO doesn't herald an end to high street shopping, consumers no longer shop as an experience in itself, rather for the experience of what they are purchasing.

"The high street retailers that are successful and will be more successful in the future are those that can deliver the



A Zytronic touch sensor sits behind a mirror-finished toughened glass frontage, combined with a forward facing HD camera

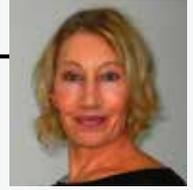
tech wave

London-based optician, Kite GB uses a projected capacitive 42in touch sensor, again from Zytronic



INTERVIEW WITH...

Rachel Hunt,
Marketing Director,
Unicol



Supporting the retail revolution

Digital signage and mounting expert Rachel Hunt at Unicol knows what's required for successful retail AV deployment. **Rob Lane** reports

Ten years on since the UK's first large-scale digital signage deployment – a combination of 42in and 22in Panasonic displays, mounted by Unicol and installed in 100+ branches of Tesco – the demand for AV in retail has never been higher.

Ironic then, that each and every Tesco signage deployment had been removed within five years of the initial installation. A case of too much too soon? Possibly.

However, as we move into 2016, retailers are even more in tune with today's myriad signage possibilities, and the retail channel itself is witnessing a new technological dawn, informed by the Internet of Things (IoT) and the growing synergy of bricks-and-mortar and online outlets.

There has never been a better time for digital signage providers to engage with retail, and the opportunities for technological innovation across all areas of the retail experience – for consumers and staff – have never been broader.

"This is all being driven from retailers adopting customer experience-centred retail," explains Rachel Hunt, marketing director, Unicol. "This is where all the data collected on the individual is used across all channels (in-store, mobile, web, kiosks, call centres, mail order, catalogues) so the customer shops seamlessly with the brand from home, on the move or in-store."

The fast-moving retail sector offers challenges to mount manufacturers. Store display designs are constantly changing, meaning no one job is the same, unless it's rolled out across identical stores of course – and even this scenario is a challenge, due to numerous building types and varying structural conditions.

With over 50 years of experience, Unicol produces standard digital signage and AV mounts for all other applications. It also specialises in custom designs for those less straightforward, structure-dependent installations. This becomes even more important when mounting LED displays, which do not follow the universal mount methodology of LCD displays.

"There are situations with LED where a structure is »

required – ceiling suspension, floor-to-wall, floor-to-ceiling and free-standing,” says Hunt. Unicol has already installed a floor-to-wall solution for Bayer HQ and is working on a project requiring a 180 x Absen A1, 3m (h) x 7.2m (w) free-standing wall.

As the UK’s largest AV mount designer and manufacturer, Unicol has gained the reputation as the UK industry standard for display and projector mounting solutions. The company manufactures everything in the UK, assembling its solutions in its 45,000 sq ft factory in Oxford.

“Our production lines absorb sheet metal, then process it by cutting, forming, welding, powder coating, assembling and dispatching,” says Hunt. “Ultimately we achieve BS8590 (the code of practice for the installation of AV equipment) for all of our products thanks to our production skills coupled with exceptional in-house design and extensive R&D.”

Of course, successful retail relies on constantly changing store designs, especially shop windows, and this is where Unicol’s innovative custom design skills come into play.

“When lingerie retailer Boux Avenue asked us to provide a mounting solution for a variable position 65in display in its shop windows, we produced a track system called Roller-Trac,” explains Hunt. “It allowed the displays to be moved from side to side or backwards and forwards, and swivelled and rotated within the shop window environment – providing window dressers greater flexibility for their content.”

The same concept was used as part of a Hugo Boss installation, allowing the retailer to regularly move a 1x3 suspended video wall back from a window for cleaning and maintenance. Similar floor-mounted versions have been produced to allow movement of video walls and small LED panel arrays.

Whilst Unicol’s business is all about providing installation solutions for displays and projectors it prides itself on making good sense of customer needs and simplifying the complexities of AV roll-outs. This in part is why the company has seen the retail installations side of its business grow as more and more outlets embrace the full suite of digital signage solutions.

As new LED technologies begin to trump LCD as the first choice for retailers’ video walls, and 4K content demands larger 80-110in displays, mount manufacturers need to pay heed, and this is something Unicol already has an answer for.

“As displays become lighter in weight, there is a temptation to use different materials for mounting purposes” explains Hunt. “However, I believe there would have to be an installation cultural change before installers would trust using anything other than metal components properly designed for the purpose. BS8590 states that in general the structure being fixed to must be able to support five times the combined load of display and mount, so a mount for a 20kg display has to have the capability of supporting a 100kg load.”

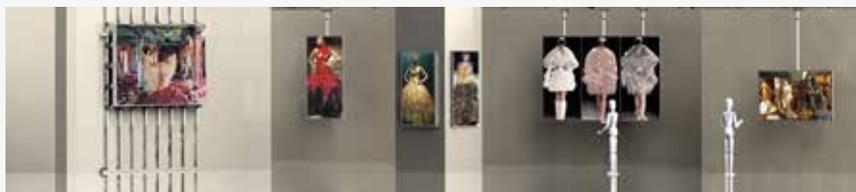
One thing is certain: as is the case across the whole of the retail channel, it’s customers that are dictating the



implementation of technological options – and according to Hunt, this extends to the choice of digital display and its content.

“The bright bold youth seeking LEDs of Primark go well with the brand, but established fashion brands such as Burberry prefer high-resolution large LCD screens. So the type of customer will probably dictate the quality of the screen resolution and content. However, as the cost reduces on higher resolution LED more stores will use them rather than LCD – especially for in window displays.”

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Boux Avenue lingerie store with 65in LCD screen that can be adjusted for height, swivel, rotate and move from side to side the length of the window





Bayer HQ, floor-to-wall structure supporting a 28 x Absen A3, 2m x 3.5m LED array before being boxed in and made good



experience the customer is actually seeking – in other words, access and use of the end product – and deliver it in the way that is most convenient to how the customer wants to shop for it,” says Giovanni Mancini, senior director at E Ink, an innovator in digital signage and electronic paper display (EPD) technology. “Retailers that make this experience as seamless as possible and across many platforms and channels will inevitably be the most successful. What we are moving toward is retailers offering different modes of shopping and enabling customers to shop using the mode they want or prefer. It’s all about the experience.”

And although beautiful, exciting and aspirational installations such as creative agency Dalziel & Pow’s Primark ‘urban sanctuary’ in Madrid’s Gran Via are an essential component of new trends in retail technology, customer interactivity, Big Data and back-room operational efficiencies need to play a part too.

“I do not believe AV technology alone can influence shopping experiences in the long term,” explains Dharmendra Patel, ‘retail guru’ and strategy director for FoodMaestro, the online packaged food database. “In the short term AV can have an impact, but the problem we have today is a lot of the AV innovation becomes available to the consumer relatively quickly – as a result seeing a 4K screen is no longer cool because I have one at home. I do see a role for creative AV solutions, but very few retailers understand this process and often cannot see the ROI.”

“Screens are not just there to make the store look pretty,” adds David Sumner, product manager (Digital Media Services), AVMI. “Retailers want them to work harder by being more closely integrated into the shopper journey.”

BEHIND-THE-SCENES INTELLIGENCE

Chris Ault, reseller account manager, LG Electronics, agrees: “Retailers are moving away from gimmicky systems, such as magic mirrors or gesture recognition, and implementing solutions that add value to the shopping experience and don’t just broadcast one way messages,” he says. “The software behind interactive displays is a lot more intelligent, recognising and responding to the demographic of shoppers to bring up tailored messaging.”

It’s what happening away from the gaze of the consumer that’s informing a lot of the retail technology decisions. Patel sees the ‘battleground’ for improving customer experience to be how content management systems (CMS) can drive experience across all channels: “How can we capture relevant consumer data and how can we let customers consume data/content relevant to them?” he says, adding: “Retailers are slowly having to re-think strategy and >>> 7



AVMI supplied a range of digital solutions to Debenhams Oxford Street, including 4x 9-screen videowalls



Several beauty brand concessions opted for digital pillar displays



ds.Xplay holographic gaming solution from RealFiction and partner ds.Xpress helps marketers deliver deeper engagement – see <https://vimeo.com/143997179>

INTERVIEW WITH...

Ian Abernethy,
Director of Sales UK,
Peerless-AV



Versatile mounts ensure all eyes are on the message

As demand for AV in the retail market continues to grow, brands must find new ways to stand out in an increasingly congested market. When it comes to specifying mounting solutions for the latest ultra-slim or super-size displays and video walls, installers know who to trust. Peerless-AV is respected worldwide for providing essential mounting solutions that result in hassle-free, productive and profitable installations. **Rob Lane** speaks to Ian Abernethy, Director of Sales UK, Peerless-AV.

With its wide-reaching range of AV mounting solutions, Peerless-AV is integral to many of the UK and Europe's leading retail installations. The company's 'Best / Better / Good' tiered product ranges provide the installer with a choice of options to cater for different retail requirements - whether it's a recessed video wall, a twin-pole modular system, a custom retail kiosk or an articulating wall mount, Peerless-AV is the first choice for leading display manufacturers and retail integrators.

Winner of this year's AV Awards Accessory of the Year - for its Full-service Quick Release Video Wall Mount Family - Peerless-AV is rightly regarded as a hugely reliable and innovative partner for installing display solutions in retail environments.

"Our differentiator? Consistently good product, of course. All our products are manufactured to be easy to configure, packed with installer-friendly features and offering the highest levels of safety and quality. Any product enhancements we make are fed back by engineers in the field, rather than designers within Peerless-AV itself," says Ian Abernethy.

"Staying one step ahead of the competition with innovative new products is key for Peerless-AV and our customers. Being an approved OEM supplier to most of the major large format brands in the industry has proved to be hugely beneficial here as it's essential to ensure the best solutions are devised for the mounting of their displays. Our relationships with the major manufacturers allows us to do things like 'proof of concept,' where we let manufacturers try out our new products and feed back their thoughts to us."

Peerless-AV also has a distinctive approach to managing relationships with distributors, resellers, integrators, consultants, OEMs and software

suppliers, offering in-depth knowledge of the industry and fast-response, technical support. The company's sales team and channel managers are renowned as the best in the industry, spending quality time to understand the ins and outs of each business and regular networking at events such as the AV User Group and WAVE. Quick reaction to market requirements and having the inside track on new kit coming up is vital - as well as a thorough appreciation of the installation challenges found within the retail environment.

"We are seeing many more screens being installed in unexpected locations, particularly in retail, with mounts having to be recessed - solutions where the screen has to be sunk into the wall where there appears to be no mounting at all," explains Abernethy. "But as ever with retail, it's done on a budget. Although there's a movement towards increased use of lighter LED, LCD currently remains the first choice for installers and continues to dominate - and this presents its own challenges."

Larger LCDs are, of course, very heavy, so installing becomes something of a construction consideration. This is further complicated when the installation involves multiple displays or a video wall.

"People are only now beginning to realise how tricky installing these displays can be. Every installation is individual and it's our role to ensure the right products are specified, with the required functionality, with the best margins and at the right price point for the retailer. With our MountFinder web tool, CAD drawings, spec sheets and Video Wall Mount Locator App, we support integrators every step of the way to avoid costly trial and error scenarios."

Retail, then, presents major challenges to integrators and these will only become greater as

Twin Pole Modular Series is ideal for in-window video wall applications



Video wall mounts deliver outstanding screen placement





One twin pole system, four different mounting options



Create bespoke Modular Series arrangements quickly and easily



retail evolves, and as more AV is incorporated into stores. Products like Peerless-AV's ultra slim and large format (up to 98in) video wall mounts, help installers to meet the needs of ever thinner and bigger displays requiring fully serviceable mounts that keep depth from the wall to a minimum and can fit the larger LCD sizes. Whatever the project requirement, Peerless-AV can deliver a reliable, safe, installer-friendly, display manufacturer-approved mounting solution. Stand out and join the winning team with Peerless-AV.

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become more customer focused – as opposed to brand focused – and I struggle to see how AV can play a role in this as a lot of the innovation is happening in relation to cloud-based application services.”

This is certainly one of a number of challenges facing AV manufacturers, suppliers, specifiers and integrators. Cloud-based CMS systems are influencing much of what is happening, both in retail and corporate installations, and are becoming drivers for AV integration.

“One specific area we are seeing as presenting an under-estimated challenge for both retailers and corporate customers is in the management of digital media content,” explains Terry Wilson. “It is one thing to invest in a roll-out of large format display screens across multiple sites; it is quite another to ensure that all the content is consistent, correctly formatted, regularly refreshed, brand aligned, company-wide and yet local. Central monitoring and management of this content – with the ability to tailor locally – is an increasing demand in the industry.”

Says Patel: “The likes of Adobe, Sitecore, Salesforce and Drupal are the main players in CMS. More recently, IBM has just launched its BlueMix service and Oracle has launched Cloud Marketplace. There is a big shift in thinking at enterprise level, and these big companies are selling systems that connect customer experience across all channels. At some point I would not be surprised if AV content is delivered through these channels and their integrators.”

INTEGRATING TECH, CONTENT AND DATA

Retailers recognise not only the need to up the ante with their CMS solutions, but the opportunity new technology integration investment affords them in terms of how they can improve their working practices and save costs whilst seamlessly integrating tech, content and data across the whole business – on the high street and online.

“AV technology is used by retailers, both small and large, not only to improve the customer experience but to open up new revenue streams and gain potential cost savings,” explains Brendan O’Reilly, product manager at Display Solutions. “The use of this technology can reduce the number of lost sales during peak periods due to less queuing time. They can also automate up-selling, provide in-store supplier advertising and gain customers contact details even when a sale is not made.” All of these advances, according to O’Reilly, combine to create an increase in revenue flow.

“Technology is enabling better and more effective interpretation of ‘Big Data’ - analysing the immense amount of information drawn from numerous sources such as social media, internet browsing and



purchase history,” adds Guy Phelps, head of UK retail and DooH sales, NEC. “This in turn is empowering a powerful intelligence to address customers as individuals for supremely targeted and personalised messaging.”

THE IMPORTANCE OF REALTIME DATA

So, it may no longer be enough just to install an LED display with arresting visuals, backed up by immersive sound; the content must be centrally managed (in a cloud-based system), interactive, and have the ability to gobble up valuable customer data – as well as reporting back to and informing a complex CMS which seamlessly links retail’s front-end, bricks and mortar set-ups with web-based stores and back-end business systems. Simple. Except, of course, it isn’t.

“Investment in AV behind the scenes to run the business operations is becoming more prevalent,” says Chris Ault. “In order to keep competitive margins, realtime data is being utilised to analyse inventory and supply chain management and for staff engagement to be able to work more effectively. The importance of realtime data compared to traditional print methods has been recognised, and a much bigger investment is being made across the board.”

“As AV Integrators, it’s no longer good enough to install siloed digital signage systems,” adds David Sumner. “We have to help our customers plug them in via feeds and APIs to back-end systems, and deliver content across multiple screens – from traditional digital posters to staff tablets, mobile apps and kiosks.”

Improvements to this ‘back-end’ are becoming increasingly important, as retailers recognise that old-style CMS are outdated. Integrators that recognise this requirement being at least as important as consumer-facing AV investments, and can include these technological improvements as part of their offer, will be at an advantage.

“It’s important that visual and audio components are supported and integrated with additional applications, back-office systems and sensor inputs, ensuring that the customer experience is consistent, cohesive and appropriate – often tailored to a macro or individual customer level,” explains Terry Wilson.

“In the future, systems will be managed a lot better due to the AV/IT convergence that is taking place throughout the whole industry,” says Chris Ault. “Traditionally digital displays were put on their own network and therefore neglected, with no one taking ownership of things such as updating content. Now, with the impact that good messaging can make being recognised, they are a much greater part of the retail eco system.”

David Sumner adds that SaaS (software as a service) CMS platforms that support multiple end-point standards will become the norm going forward. “We expect a move away from proprietary media players and towards multi-channel both in terms of the playback hardware and OS but also integration between the CMS software and other retail back-end systems. HTML5 content authoring and CMS software with APIs are also important parts of this trend.”

And with retail productivity collaboration platforms such as that offered by Concrete increasingly becoming part of a retail brand’s technology spend, this inevitably has an impact on how much budget can be allocated to AV specification – and how retail brands select their hardware technology partners.

“AV in retail is going to become harder and harder,” says Dharmendra Patel. “Yes there will be a need for it, but a lot of the high-margin content management and distribution work will be owned by large-scale enterprise. There is a danger of AV losing its role in the whole customer experience space primarily due to the fact that a number of retailers are now engaging with cloud infrastructure, getting comfortable with it and then investing more in this to drive experience.”

But, regardless of how much back-end, online, cloud or customer-facing tech is specified, and who it’s specified from, AV will continue to have a big part to play in the retail revolution, especially whilst bricks and mortar outlets continue to endure (according to TLT’s survey, 67 per cent of retailers regard physical stores as ‘vital’ to their



Pioneer Digital installed Dynamo 3mm pixel pitch LED displays – 4x 2.5m and 3x 1.5m ‘Bling Walls’ – in three Sunglass Hut stores

future).

“By embracing technology retailers empower their customers to research, browse and make their purchase wherever and however they so wish,” says Guy Phelps. “Retailers must work with their customers’ needs to give them all the channels they desire. This means an online presence for research and a local bricks and mortar presence for tactile comparison to directly see and touch the product.”

SHOW-ROOMING

Indeed, Amazon’s recent decision to open its first high street book store cannot be overstated: “This reflects a growing number of e-tailers who are turning to physical stores to create unique shopping experiences that simply cannot be replicated online,” says Christopher Parker, senior product manager, Visual Solutions, Sharp Europe.

“People are increasingly using the stores to browse then buying online,” adds Mark Childerhouse, senior account manager, Pioneer Digital. “This has seen the concept of ‘show-rooming’ get stronger in recent years, with digital mirrors, 4K displays and large immersive video walls being popular fixtures to display products before actual goods are seen.”

And it looks as if 2016 could be the ideal time for AV integrators to focus their efforts on the retail channel, as the available technology and solutions enter their next phase. According to Chris Ault, many retailers are now reaching the ‘refresh stage’ of their product cycle, with the systems that were installed five years ago, “when we experienced a rise of AV in the retail environment,” now appearing dated.

Regardless of the changes in the way retail approaches the dynamics between instore, online, back-end and cloud technologies, it’s clear that AV must keep pace with the market’s fast-evolving technological requirements, as Brenan O’Reilly explains: “Being ahead of the trend with new technologies is a must for AV technology experts and SIs. Retailers continue to request more innovative ideas, and we must have the technology capable of fulfilling these needs.” ■



Helsinki’s Kamppi Centre shopping mall boasts a 14.4m high Matrox Mura MPX Series-powered display wall, installed by Finland’s Craneworks