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Systems  
Europe

# theISE daily EXECUTIVE ISSUE



## THE SHOW IS THE STAR

Cirque Du Soleil's  
**Daniel Lamarre**

on the power of creativity

**Aglaia Kong**  
Google's Corporate  
Networking CTO on the  
possibilities of IoT

**Ole Scheeren**  
The award-winning  
architect on the  
importance of space

**Mark S. Valenti**  
The Sextant Group CEO on  
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**Mike Blackman**  
Managing Director  
**ISE**

# WELCOME

Welcome to the very first ISE Daily Executive Issue. Produced by the ISE Daily team, it distils the best of the very broad range of thought leadership at ISE 2017, drawn from the ranks of key exhibitors, conference speakers, user groups, and those at the heart of the ISE Show experience.

ISE is the world's largest trade show for the AV and systems integration industry, and this year it was larger than ever. The show represents a hub where overlapping technology-driven vertical market sectors coalesce around the commercial and residential AV

installation industry. If you're in AV, ISE has all the connections you need.

Those who come to ISE represent a cross-section of market leading manufacturers and the world's leading industry experts and thought leaders. They come to display the cutting edge to their customers and share insights with their peers – through conference sessions and panels, professional development seminars, ISE Show floor theatre sessions and much more. The result of what is being discussed on the show floor will be experienced by all of us on a daily basis, in our homes, offices and the general environment.

This publication is an extension of that debate. Here you'll find a comprehensive review of the technology and business trends that will influence the development of the AV systems integration industry over the next twelve months and beyond.

ISE brings together the latest in technological innovation and workflow solutions. The Executive Issue provides an overview of where these varied but connected companies and their products are taking us. This is what makes ISE valuable. It's a glimpse at the state of the art, a peek behind the curtain of possibility. We hope you enjoy it.

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**Aglaia Kong**  
CTO, Corporate Networking  
Google

# COOL FUTURE FOR IoT

By Monica Heck

"People are becoming more audacious with their use of the Internet of Things (IoT), and are using it for all sorts of applications well beyond the scope of energy management within smart buildings," says Google's CTO for corporate networking, Aglaia Kong, speaking at the Smart Building Conference during ISE 2017.

"Building management will become a lot cooler as a result," she adds. "The deployment of new solutions like IoT sensors will support better wayfinding in buildings, enabling them to navigate people towards a particular asset, such as a fire extinguisher. IoT sensors can also track the movement and location of assets within a facility, which improves the overall safety of that location."

Kong, who last year joined Google

from Cisco, where she was CTO for Internet of Everything and VP of technology, has now taken on the challenge of designing, delivering and operating the Google and Alphabet network infrastructure.

During the conference, she highlighted the benefits of IoT in terms of building utilisation, especially in locations where real estate is at a premium.

"This will support trends like hot-desking, where people can use a space for a couple of hours," she explains. "IoT would allow spaces, and the experience within them, to be customised in terms of light colour, heat and even decoration, for short spaces of time."

In addition, IoT brings with it a more subtle level of environment control, she notes, which goes far beyond a simple 'on or off' instruction. "It enables lights, air conditioning, and so on, to react to

where people are located and to how many people are in a specific area, which is an exciting opportunity."

In terms of addressing the operational challenges of the current market, Kong noted that while the technologies to enable next-generation building management through IoT are already in existence, the challenge for facility managers is to step away from 'siloed' products towards an integrated solution. In this case, IoT enables a centralisation of functions as an alternative to having to manage many disjointed systems.

"Building managers are currently faced with the complexity of handling all the individual technologies that control various aspects of a building, including surveillance, energy management and user experience," says Kong. "I'm keen to highlight how they can roll out a horizontal, IoT-based

architecture, which can use an existing network to centralise disparate systems and simplify the overall management task."

Big data management is another hot topic for 2017, according to Kong: "IoT sensors generate a lot of data and as we go forward, the mining of intelligence from this data will be key to helping facilities managers in their quest for more efficient building management."

However, she warns the industry of the security challenges that go hand in hand with the advent of an IoT world. "Objects such as lights become endpoint devices, not very intelligent perhaps, but because IoT sensors are devoid of security clients, this opens up a whole can of worms."

"With new possibilities come new vulnerabilities, and everyone needs to be mindful of the security risks that arise with these new solutions."

With new possibilities  
come new  
vulnerabilities



# A TSUNAMI OF BUSINESS OPPORTUNITY

By Lindsey M. Adler

Cutting edge in the world of smart buildings may someday be a matter of dumping a bucket of nanotech out on the ground and watching a building grow itself, muses Mark S. Valenti, president and CEO of The Sextant Group.

In all seriousness though, as Valenti covered in his morning keynote presentation to the Smart Building Conference at ISE, in the next 10-15 years, all new buildings will be smart, and the key to advancing smart buildings has little to do with technology developments. The technology and software required is readily available, but growth in the smart buildings market has everything to do with changing business models—the way projects are bid in particular.

A relatively new, cutting edge model Valenti pointed to is integrated project delivery, where the designer, the owner, and the builder have a shared equal risk, explicitly identified in the request for proposals (RFP). The traditional design-bid-build model, supported in the US market by a body of case law evolved over the last 125 years, stands in the way of smart buildings, Valenti says, “because smart buildings inherently have interconnected systems. When you begin to interconnect systems, who’s responsible?”

In the integrated project delivery model, there’s a shared risk across the board of trades involved, and conversely, a shared opportunity.

“As a designer, you now have motivation to contribute to the owner’s wellbeing because if the project comes in under budget, you’re going to get a piece of that budget back in your pocket,” he observes.

As a result, an owner’s representative for AV as an independent entity is an emerging role in successful smart building projects. Within this entire context, Valenti says, “we are all now seeing an increasing level of interest. So much so that I think by the end of this year and into next year, it’s going to be a tsunami of business opportunity. In the US, we’re seeing the first ripples come to shore.”

Within this narrative, AV professionals will emerge with a new category of skilled technician and individual project managers with capabilities across the board.

“The advantage the AV industry has is that we are experts at integrating a diverse set of manufacturer goods into a cohesive, functional system,” Valenti explains. “We’ve been doing that for 30 years, and we’re really good at it. The problem is we don’t have the expertise beyond audio and video to understand the implications on other important systems.”

Beyond the Smart Building Conference, Valenti was enthusiastic about returning to ISE 2017, after having previously attended as an InfoComm officer, president-elect and president, in 2008 and 2009. One of his favourite parts of ISE is the CEDIA element co-mingling with the InfoComm element - being able to explore the residential technologies while seeing a lot of familiar faces. He was keen to “stumble into a few technologies that make me go woah!”

He was going in search of this mission on the periphery of the show, where the little 10x10 spaces dot the halls. “That’s where the magic happens,” he says. “Being able to find one or two nuggets of cool stuff. That’s the fun part.”



**Mark S. Valenti**  
President and CEO  
**The Sextant Group**

“

When you begin to interconnect systems, who’s responsible?

”

**Ole Scheeren**  
Architect and Principal  
Büro Ole Scheeren

# THE IMPORTANCE OF PHYSICAL SPACE



“

Architecture should be inspiring and provocative

”

### By George Cole

The best architects have their eyes on the future, while keeping their feet firmly on the ground. Multi-award winning architect Ole Scheeren most definitely belongs to this category. His buildings, such as the CCTV Headquarters in Beijing, China (the second largest building on the planet) and the Axel Springer media headquarters design in Berlin, combine futuristic design with functionality; cutting-edge materials with a clear vision of how a building can best suit the needs of its inhabitants.

At ISE 2017, Scheeren explained his approach to his work, “I think about architecture as prototypes – I’m interested in developing examples and researching the possibilities of how we can do things or think things differently.” Scheeren also sees a strong connection between film-making and architecture, which he finds inspiring, “I’ve always been interested in narratives, and I believe architecture is the space of narratives. I think of buildings in terms of what happens to the people inside of them. Architecture should be provocative and inspiring in terms of how people feel in spaces and how they act in spaces.”

He adds, “The ability to imagine in that sense is very filmic, and always something I believed in. I love cinema and I see very strong connections between the two. The story-led aspect of architecture is at the core of how it relates to movies.”

It is perhaps no accident that one of Scheeren’s most memorable projects was a floating cinema in Thailand, rebuilt at the 2012 Biennale of Venice, with the screen and auditorium sitting on top of calm waters.

Many of Scheeren’s projects have been in Asia, such as China, Singapore, Malaysia, Thailand and Taiwan, “I spent a decade focusing on a project in Beijing,” explains Scheeren, “because Asia was a place that was so explicitly connected to the future, and things were changing so rapidly, it was a very exciting place to be for an architect.”

Buildings need to reflect the culture of wider society, says Scheeren, “A building lives in the truth of its environment – not just its physical environment, but the psychological one – how people live and think, and this is different in different parts of the world. But I believe there are qualities that transport from one area to another.”

Scheeren, the Opening Address speaker at ISE 2017, says that architecture and technology are tools that can help humans connect to each other, but adds, “Intelligence and intelligent architecture is not about technology, but starts with design and the ambitions you have.”

Many people are getting excited about a future where smart buildings and smart cities transform our lives but Scheeren says, “Smart buildings and smart cities are often seen in the context of energy efficiency, with everything controlled by technology,

but shouldn’t we also think about smart buildings that are socially inclusive? A building that saves you energy, but is horrible to live in, doesn’t matter. Ultimately, it’s about the quality of life – the most important measure of everything.”

Technology moves at breakneck speed, while buildings remain standing for many decades, so how do architects reconcile this tension?

“This is why architecture cannot derive its legitimacy from technology,” says Scheeren, “but if you don’t integrate things, they will feel divorced and separated, but if you integrate too much, you can become a victim of standards. The solution is to create architecture that is robust enough to survive for as long as the physical matter stands. Social sustainability rather than technological sustainability. As long as we focus on the things that matter, there is a chance that they will survive.”

Robotics and artificial intelligence (AI) are set to play a significant role in modern society, so how will they impact on architecture?

“If we could predict its future, we might be very happy, or very scared,” says Scheeren.

“We are not even at the beginning of understanding that question,” he adds, “However the importance of the quality of physical space is profoundly human and will never vanish. The more we live connected to the virtual world, the more we will acknowledge the need for the physical reality to counterbalance that.”



Integrators must keep up with innovation - not just from AV, but also IT

By Ian McMurray

If you can remember when the height of audiovisual sophistication was 35mm slides and 8mm film projectors, you're not alone. Robin van Meeuwen, president and CEO of Crestron EMEA has fond memories of those days too.

"My father was involved in the AV business ever since I was a little boy," he says. "I regularly came into contact with key customers and grew up with all the new technologies."

For someone who has spent much of his adult life in the AV business, ISE must seem something of a home from home.

"We've been exhibiting at ISE since the first show in Geneva and have seen it grow into the amazing show it is today," agrees van Meeuwen. "It attracts business owners, technical specialists, sales executives, designers, consultants, end users – everyone who's involved in the industry. There's no other show of its kind in the world. The sheer volume of people coming to the RAI in February is incredible, and it creates such a buzz around our stand. The organisers have done a terrific job at attracting so many people to the show. This is what makes this show so important to us."

"Since the first ISE, we have supported the notion of one major international professional system integrator show," he continues. "More than 90% of our integrator partners attend the show and we use it as a launch platform for new technology. This year alone, we are showing more than 30 new products at the show – some of which are strategically very important to our company. Within four days, we can share our vision for these technologies and prove to those partners that we are the key partner in our industry."

Discussion of what's strategically important to the industry is a reminder that some commentators have suggested that, in an era of increased hardware commoditisation and

plummeting hardware prices, the future of the AV industry lies in software with its ability to deliver the functionality that creates differentiation and adds value. It's a subject that interests van Meeuwen.

"Today AV integrators predominantly make their living by delivering hardware solutions to the customer. Software plays a very small part of the overall solution," he says. "On the other hand, our Fusion software is mission-critical for our company going forward, because from a user experience, it connects, controls and monitors everything, and is totally scalable."

"A big challenge this year is getting the end user and integrator to understand the value of Fusion," continues van Meeuwen. "We used to sell Fusion for a fixed price, and even on some projects, we gave it away. Today, Fusion is bespoke for each customer, because each customer's requirements are different."

If that's a challenge for Crestron, the progressive 'IT-ification' of the AV industry that it is gradually coming to terms with is less of one – for his company at least.

"Integrators need to improve their IT skills," he believes. "They need to learn and understand the challenges of how to set up a network, network security, bandwidth and so on. On top of that, they must keep up with innovation – not just from AV, but also IT. Technology changes fast, and now they have two disciplines to keep up with."

"We've been speaking about this for more than 15 years now," declares van Meeuwen. "First, it was convergence – and now, it's IT-ification. For us, it happened years ago with the advent of IP ports on our products. Almost every product we sell today has an IP port and is connected to the network."

For anyone who has ever seen their 35mm slide presentation fall in disarray from its carousel, or grappled with an unruly spool of 8mm film, the new networked world of AV must be something of a wonder to behold.

# IT ALL BEGAN WITH SLIDES...

# PIXEL POWERED

“

When you collide the people, the ideas, the design and tech and products, great things necessarily happen

”

**John Underkoffler**  
CEO  
**Oblong Industries**

By Heather McLean

John Underkoffler, CEO of Oblong Industries, has been working on next generation user interface (UI) approaches for the last 25 years. First at the MIT Media Lab, then through the design process for films like *Minority Report* and *Iron Man*, and today at the LA-based UI company he founded in 2006.

“The basic assertion is that the UI is the most important part of the computer for us humans,” he says. “It’s the only part of the computational experience that we can actually see and touch - and yet it’s the part that’s received the least overall attention during the past 33 years. But real, substantial advances are possible, and when they appear they can be utterly transformative.

“A core component of everything we build is the idea that the world needs collaborative computation, in contrast to the one person at a time nature of every other computer and digital device out there,” he says. “I can’t imagine working on anything

more exhilarating!”

Underkoffler states that pixels are the future. “It’s clear that we’ve entered an era of pixel abundance. Just walking the aisles of ISE confirms this,” he adds. “The world finally has the ability to deploy, at reasonable cost, an endless array of screens, projectors, mobile and fixed visual display surfaces and devices. As individual surfaces, each offers isolated opportunities for presentation, communication, delight. But when you combine these into a display continuum, with all pixels accessible just by pointing, not just to one individual, but to all of its cohorts simultaneously, a new world opens up.

“Fluid human command of that digital cascade in real space has an energising effect,” he continues. “When you outfit three dimensional space - meaning architectural, human-scale space - with pixels in this way, and open them to immediate contribution, command, and control, in the most natural way, by those in the space or in

connected spaces, new ideas form and new stories emerge. Decisions and insights are available that are inaccessible otherwise, and opportunities unfold.”

As a designer of human-machine interfaces, Oblong has absolute conviction around the real opportunities of the pixel operating system, Underkoffler affirms. He adds that this is how the company thinks of its product, Mezzanine.

“Pixels are the new oxygen,” he states. “Of course, there’s still some challenge in the marketplace itself. It’s historically a hardware world, and naturally there’s some apprehension toward software, a stance that tends to slow progress and drive only small and incremental changes in the AV industry’s business patterns. But the marriage of AV and IT can bear incredible fruit.

“Here the industry is still just barely scratching the surface; it hasn’t quite arrived at a full willingness to embrace the paradigm,” he continues. “But we’re thrilled to be a participant in this forward-looking

conversation. We know there is a tremendous margin, and potential, in a shift in the way we think about AV.”

He is equally enthusiastic about ISE. “ISE is the largest gathering of AV and IT professionals,” he says. “There is no constituency that better appreciates the immersive, visual, pixel-rich, device agnostic, multi-location, collaborative capabilities offered by our spatial operating systems. ISE is a magnet, and a force unto itself. When this much of a singular market can assemble together in one place, when you collide the people, the ideas, the design and tech and products, great things necessarily happen.”

Underkoffler adds, “ISE continues to provide the best forum for connecting with colleagues and defining together the future of our industry and business across Europe and the world. The exchange of ideas and the relationships made at the show are priceless.

“I’m hoping we can talk less about pixel resolution, and more about pixel utility, in 2017.”





## Franz Kammerl

President

International KNX Association

# TAKING KNX TO THE NEXT LEVEL

By Monica Heck

Making the KNX standard, and therefore building automation, more accessible to all in order to improve connectivity and security is the prime goal of the International KNX Association this year, according to its president, Franz Kammerl.

Over 45 members of the KNX Association were exhibiting at ISE 2017, 15 of which were presenting their innovations on the Association's stand.

Kammerl's day job at Siemens sees him leading product management for wiring accessories and overseeing energy management. He can draw upon a fruitful technical career book-ended by automotive technology and automation, which fuels a desire to see project integration simplified for better and more secure results.

Supporting this simplification drive

is a focus by the KNX Association on the Internet of Things (IoT), more precisely on bridging the gaps between systems and verticals that may not all be working with KNX today. This is of particular importance in projects where, when one item isn't working with KNX, bridges to the Internet are used to circumvent the issue.

"We are bringing KNX to the next level, into a world where it can be used with standard internet technology, mechanisms and knowledge, making the integration of various disciplines much easier than in the past," says Kammerl. "This huge project will launch this year and will hopefully be completed in 2020.

"The result will be the availability of a complete IoT solution over KNX, which will enable not just those with KNX-specific knowledge, but anyone who has knowledge of the internet and IT environments, to work

with KNX and use the information distributed over the network it supports."

Kammerl is also pushing a simplification of the KNX network communications protocol, in particular the KNX Engineering Tool Software (ETS), an initiative that will be of benefit to many verticals in the AV market including commercial buildings, smart homes and residential projects. KNX ETS is a manufacturer-independent, Windows-based configuration software tool able to design and configure intelligent home and building control installations using the KNX system.

"There are projects where specific groups of installers are not working with KNX today, perhaps because they haven't completed the training that's needed in order to work with the standard," explains Kammerl, who hopes to target those projects with the creation of an easier KNX

ETS offering called ETS Inside.

"During 2017, we will be introducing an embedded version of ETS that resides inside the system after installation and that is password-accessible using a standard browser," he explains. "This results in an installation with a lower point of entry, and this will boost the residential market."

A spotlight is also being shone on the security of home automation through the use of KNX Secure, with the aim of providing more protection against cyber attacks.

"We offer strong protection already," says Kammerl. "But networks can be vulnerable to settings changes, which is why KNX Secure was launched. It gives manufacturers the possibility to develop products that have a much higher rate of protection against unauthorised access without passwords and other security."

“

The result will be the availability of a complete IoT solution over KNX

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# BUILDING BRIDGES

**Raviv Kramer**  
Deputy CEO  
Kramer Electronics

“Software has always been my passion,  
I experience it as a form of art”



**By David Davies**

“It’s time for us to deliver on our brand strategy,” says Kramer Deputy CEO Raviv Kramer, after another landmark ISE for the specialty pro AV giant. Kramer was highlighting its ‘AV over IT approach’ and how that fits in with the converging AV/IT industries.

The company showcase – which included a demonstration of Kramer’s virtual matrix, low latency encoders and decoders, and cloud-based control technology – also underlined the progress the company has made with regard to software design and integration.

“It used to be that electronic hardware design by itself could solve most signal management needs, but not anymore,” says Kramer. “Today, almost everything is related to software

– communication protocols, EDID management, web servers, signal processing, and so on.”

For Kramer himself, this is like second nature given that software has played an integral role in his working life.

“Software has always been my passion,” he says. “I experience it as a form of art, shaping ideas into something tangible that people can connect with.

“I carried out my military service as a software engineer, gaining precious software development experience and working as part of a team. There were plenty of young and bright people around, and it was a great place to grow in. When I completed my military service, it was only natural that that’s how I would start with Kramer.”

Accordingly, the software department has “grown tenfold”

since Raviv Kramer began working at the company more than a decade ago. Since 2011, he has served as Deputy CEO and taken an interest in all Kramer operations – from product conceptualisation and R&D, to deployment and logistics.

“Ten years is an extremely long time in terms of R&D – enough time for several generations of technology – but if I have to sum it up, software is what has happened to Kramer,” he confirms. “Just look at the smartphone revolution that started less than ten years ago. The abundance of apps and connectivity has transformed entire industries – and ours is no different.”

Recently enhanced by the December 2016 acquisition of iRule – which “strengthens our commitment to develop the next generation of cloud-based control solutions” – Kramer says the

company is now set for a year that is again likely to witness a huge amount of change.

“I imagine that 2017 will be a year of building bridges,” he says. “The Internet of Things is all about smart communication. It’s about connecting the many into a whole. Control is going to play a big part in orchestrating everything and digesting data into meaningful insights.

“I think we’ll see an influx of AV products cross the bridge to the IT world, with a focus on streaming devices, powerful management solutions, and managed products,” he adds. “And of course, we manufacturers have the important duty of providing the industry with the right tools to cross the bridge from HD to 4K. It’s all about providing the right mix of innovative products, training, and support.”

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“

A unique blend of science, magic and emotion is at the core of our industry

”

**David Labuskes**  
Executive Director and CEO  
**InfoComm International**

# RISE OF THE ENTERPRISE DECISION MAKER

**By Monica Heck**

This is set to be the year of the enterprise decision maker, whose rising power and influence is having a direct impact on the entire AV supply chain, according to InfoComm executive director and CEO David Labuskes.

Now in his fourth year at the helm of the renowned industry association that represents the commercial audiovisual industry, Labuskes says this latest trend stems from the increasingly strategic role played by AV within the enterprise space.

"This is true whether the technology is used to connect employees and to create better communication between them, to support collaboration between people scattered across the world, or to create better engagement with customers and reach them at a level

of emotional sincerity that wouldn't have been possible before without the advent of some of the solutions we have seen at ISE."

As a result of this trend, the AV supply chain, represented at ISE by manufacturers, enterprise decision makers, and all of the participants in between, such as consultants, integrators and distributors, are all looking towards shifting value propositions and shifting roles within that chain. Furthermore, according to Labuskes, the value of the solutions and services offered by the industry is shifting away from the provision of complex technical skills and increasingly towards the final result, the overall experience provided to the customer.

"The increasing availability of technology and the ever enhanced ability to connect various different components into unique solutions, is something that can't really be

seen anywhere else in the world with the clarity that we see it at ISE," he explains. "The real value of AV increasingly lies within the experiences that we create with it rather than within the components of the technology itself.

"AV used to be incredibly complex to connect, and therefore created value through the skill set needed to handle it. The value people are seeking is now shifting to the experience that the connectivity creates for customers, employees or audiences, regardless of the business or the vertical market."

The person that signs the cheque is critical and demanding, a fact that hasn't changed since humans started engaging in commerce. What's changed, says Labuskes, is the expectation, knowledge and expertise of that individual.

"As our industry meets with those individuals, they're making

decisions on eight digit deals in which tens of millions of euros are involved," he says. "The expectation is that we, as an industry, can demonstrate and deliver not systems themselves, but rather understand what that enterprise decision maker wants as an outcome for this investment, and demonstrate how we can deliver it. I think that has been evident throughout the show, whether as part of conversations taking place within private meeting rooms or in the way in which manufacturers demonstrate their products."

There isn't a year where Labuskes doesn't leave ISE excited about the future of the industry and 2017 is no different. "A unique blend of science, magic and emotion is at the core of our industry," he says. "It drives it in a way that just doesn't happen in other technology ecosystems."





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# THE FUTURE HOME IS HERE AND NOW

**Vincent Bruno**  
CEO  
CEDIA

“It’s no longer about speakers connecting to players, it’s just music in the home”

By Monica Heck

The term ‘future home’ is a source of frustration to CEDIA CEO Vincent Bruno, conjuring up something likely to be found in the pages of a sci-fi novel.

“The words ‘future home’ imply that it’s inaccessible,” he says. “Whereas the technologies that homeowners demand are being seen in perfect working order, fully accessible, all over the ISE show.”

“The very idea of a ‘connected’ or a ‘smart’ home is primitive thinking at this point,” he adds.

“We should just be calling it ‘the home’,” he continues. “We’ve reached the point in the adoption curve where it’s implied that your home has internet connectivity, music available throughout, and automated functions such as light management systems, and so on.”

In fact, Bruno foresees that in around ten years, technology driven language will have made way for more comfortable, layman’s terms such as the ‘intuitive’ or ‘thoughtful’ home. “Technology that becomes mainstream isn’t scary to the homeowner anymore,” he adds. “The intimidation that remains with this type of technology today will have diminished by then. This year’s ISE was another great step in that direction.”

Bruno has worked in the AV industry for over 30 years, which is longer than the very existence of the organisation he now runs. His career - bracketed by his beginnings as a product engineering manager for a professional video products and most recently, his tenure as director of marketing at Crestron - which ended in the Autumn of 2015 when he took the top job at CEDIA - has

given him a bird’s eye view of the challenges facing residential AV.

“One of the main issues facing our industry is that more and more people are demanding technology in the home. It’s no longer the preserve of the top 1% income earners worldwide,” he explains. “In the US alone, we have over 80 million millennials who demand technology in their living space. We have a workforce shortage; for starters, we are in need of people to assist clients in managing all their technology.”

With technology everywhere in everyday life, CEDIA has evolved from designing, installing, upgrading and repairing technology, towards managing technology for clients. “This year, we will see yet more connected devices, and we all know there’s nothing easy about setting up and securing a home WiFi network.

“There is a need to simplify

and secure the technology in the homeowner’s life; that’s the confusion that CEDIA members are setting out to dispel.

“A bad installation slows down business,” adds Bruno. “Because people get scared of technology.”

“So our opportunity is based on the fact that enough people have experienced good technology in their lives, and that we have a new generation that is actually demanding technology in their lives.”

Bruno also noted that at ISE, the marketing of various products is evolving from being technology-driven, towards highlighting an experience in the home.

“In 2017, it’s no longer about speakers connecting to players; it’s just music in the home,” he says. “It’s moving away from point products, and towards selling the lifestyle.”



# CREATIVE HIGH-WIRE ACT

**Daniel Lamarre**President and CEO  
**Cirque du Soleil**

By Michael Burns

"At Cirque du Soleil, we're in the 'show business' industry, but the show comes first", says Daniel Lamarre, president and CEO of the global live entertainment giant.

"There is an inherent need to nurture creativity throughout the company, from creating an inspiring working environment to harnessing your own employees' creativity through various programmes, and even the art of identifying the right people at all levels."

Lamarre, in a Closing Keynote that acted as the finale to the most successful ISE to date, had his focus clearly on the need to stimulate creativity and innovation, as a daily priority, in an organisation.

"Recent research shows that only 25% of people feel they can use their creativity on the job. This means that 75% of available creativity on the planet is not being harnessed, leading to a huge waste of productivity," he says. "It's where I believe leaders should put the most efforts and give their employee's meaning to their work. Investing in trend watching and R&D outside of your core business is also essential to stay on the cutting edge of our industry, and to be able to lead with insights and analytics."

Cirque du Soleil has a Trends Group that researches the globe and identifies new memes in architecture, fashion, music, live entertainment,

hospitality and all other forms of art.

"They feed the company with their findings and trigger innovation within our teams," explains Lamarre. "This has led to several technological innovations within our shows around the world."

In similar fashion, in today's business world, Lamarre feels it's close to impossible for an ambitious organisation to remain local.

"I believe that a leader needs some personal inclination for travelling around the world to lead international development, but also the creativity to use and build a global network to develop business," says the CEO. "Both aspects are crucial to capture every opportunity that comes your way."

## COMPLEMENTARY CONTENT

According to Lamarre, the *KÀ* show, presented in Las Vegas, has been Cirque du Soleil's most technologically advanced production to date.

"*KÀ*'s hydraulic platform transforms the audience's take on the normal conception of the world, switching between horizontal and vertical above a gaping void," he explains. "Through advanced computerisation, it mixes telemetry and interactive video projection, giving the artists full control on what takes place on the screens. I personally love how this demonstrates that no matter how advanced the technology is, it must

always serve the artists."

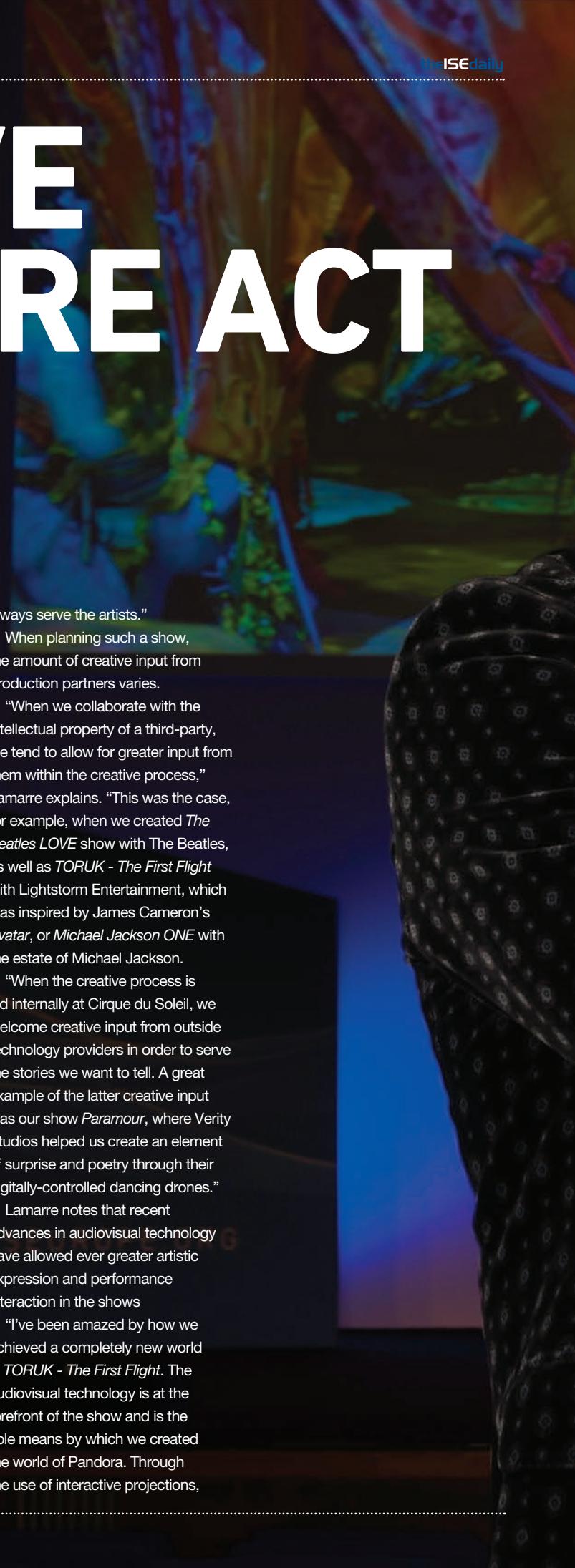
When planning such a show, the amount of creative input from production partners varies.

"When we collaborate with the intellectual property of a third-party, we tend to allow for greater input from them within the creative process," Lamarre explains. "This was the case, for example, when we created *The Beatles LOVE* show with The Beatles, as well as *TORUK - The First Flight* with Lightstorm Entertainment, which was inspired by James Cameron's *Avatar*, or *Michael Jackson ONE* with the estate of Michael Jackson.

"When the creative process is led internally at Cirque du Soleil, we welcome creative input from outside technology providers in order to serve the stories we want to tell. A great example of the latter creative input was our show *Paramour*, where Verity Studios helped us create an element of surprise and poetry through their digitally-controlled dancing drones."

Lamarre notes that recent advances in audiovisual technology have allowed ever greater artistic expression and performance interaction in the shows

"I've been amazed by how we achieved a completely new world in *TORUK - The First Flight*. The audiovisual technology is at the forefront of the show and is the sole means by which we created the world of Pandora. Through the use of interactive projections,





No matter how advanced the technology is, it must always serve the artists

we transport the audience into a completely different world, which is as breathtaking and mesmerising as any other world we've created before. Video projections sometimes overflow beyond the set and right into the audience, giving spectators the feeling they're not merely gazing at Pandora, but they're actually on the planet. At one point, waves start in the audience before washing up on shore on stage; in another scene, a starry sky is projected all over the arena, virtually turning it into an upside-down planetarium. Lighting is also crucial to adding volume to the performers, set elements and props. It focuses the audience's attention on story. In *TORUK – The First Flight*, a state-of-the-art tracking system is used in unprecedented ways to help with this task. Hidden in their costumes, the artists wear a tracking device linked to follow spots and video projectors that react to their movements in real time. This is for me a turning point since these projections have endless possibilities to transpose the artistic desire of our creators."

#### BIG VISION

After his ISE appearance Lamarre is moving back into 'full creation mode' with the rest of Cirque du Soleil, including developing a first-of-its-kind attraction in the heart of New York City, *The NFL Experience*. Spanning 40,000 square feet, this four-story innovative exhibit will

capture fans' passion for American football through an engaging blend of high-tech displays, as well as immersive and interactive elements. There's also a new touring show under the big top, *Volta*, set to debut in Montreal in April 2017.

"*Volta* will be our 41st original production and will tell a spellbinding story about the freedom to choose, and the thrill of blazing your own trail," says Lamarre. "Inspired in part by the adventurous spirit that fuels the culture of action sports, the show weaves the adrenaline rush of acrobatics into a visually striking world driven by a stirring melodic score, which was composed by international artist, M83."

Lamarre's discourse on the importance of R&D and how technology propelled Cirque du Soleil to new heights of creativity particularly resonated with the ISE audience.

"R&D is essential to any type of industry, not only pharmaceuticals or information technology," he explains. "Cirque du Soleil's R&D and success is directly linked to our capability of integrating technology in our shows. Through C-Lab, our own R&D laboratory, we dedicate time and resources to explore and play with new technologies, but also partner with universities. All in order to force our creativity even further and fulfill our number one goal: always push the limits and boundaries to surprise and amaze our audience."



# SOUNDING OUT THE MARKET IN STYLE

**Maurizio Conti**  
President  
**HTE - Home Theatre Environment**

By Ian McMurray

At ISE this year – and especially in halls 5 and 7 – there was much talk of next generation audio and immersive sound. That's music to the ears of Maurizio Conti, founder of HTE, who has been creating audiovisual solutions and custom home theatre environments for the past 30 years.

"New sound technologies like Auro-3D and DTS-X are giving new impetus to the home theatre market," he believes. "That's certainly true for us, as our focus is on working with a room, rather than against it, to create the optimum acoustic design."

"We apply acoustic rules very differently to others in the market, embedding the acoustic design within the room to take home theatre experiences to the next level. Hearing

wonderful, immersive sound in a room that is behaving correctly in terms of audio response is the only way to fully enjoy what these new technologies can bring."

Conti is a great believer in the value of trade shows. His passion, he says, has always been the world of movies and theatres – and great sound. It was this that led him to form Audio Video Design, and subsequently HTE.

"From the beginning, I followed what was going on in the US market, and every year saw me at CES to find out about the latest gear," he recalls.

Although there are many who have recently discovered the benefits of attending ISE, Conti is among those who have been at every show since its launch in 2004.

"I was in Geneva for that first show, and I've watched it grow

over the years," smiles Conti, noting that he was also at CES in Las Vegas when the concept of CEDIA was first mooted. "I've especially noticed how education has become an increasingly important part of ISE, and how that has grown. It's become an excellent opportunity for professionals to receive the training they need."

"The other thing I've noticed over the last 13 years has been how the quality of the stands on the show floor has improved," he adds. "It's become a great show. I've always believed that Europe deserves a show of the calibre of ISE, and now it has one."

ISE has always been known as an excellent venue for meeting potential new resellers, and Conti says that he is looking to increase the number of custom installers with whom HTE

works – both in Europe and in the USA.

This was the fourth year that HTE joined forces with Wisdom Audio at ISE, the two companies sharing a stand.

"ISE is our preferred showcase," says Conti, "and it enables us to provide real proof of what we can deliver to customers. This year, we were presenting our online configurator. It allows a proposal to be obtained in less than five minutes, based on anything that appears in our catalogue. We're expecting to see growth in our business in 2017 and this new tool will help us to manage that."

Conti's enthusiasm for his business, for delivering great home theatre experiences, and for ISE are unmistakable. Thirty years on, his profession is still his passion.

“

ISE enables us to provide real proof of what we can deliver to customers

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**Wolfgang Lenz**  
President  
Comm-Tec

The industry will continue to face a shortage of well trained people

“

# TAKING ADVANTAGE OF AV OPPORTUNITIES

By Heather McLean

A Kodak veteran, Wolfgang Lenz founded Comm-Tec in 1986 with the idea to offer distribution services to overseas AV manufacturers.

"We did not just want to move boxes," he says. "We had the desire to act as the European arm for the manufacturers who did not choose to set up their own facilities in Europe for whatever reason. Since then we have attracted many manufacturers, and currently carry around 40 well-accepted brands from all over the world in our product portfolio."

Looking back over his thirty years in the industry, Lenz observes that his company and the wider AV world has had to face many challenges.

"This industry has learned over many years to develop exciting new technologies," he explains. "The distribution and dealer-integrator network has closely worked with the manufacturers to bring new communication solutions to the market. The speed to adopt new

technologies, technical standards, and the way to go to market, has increased, and only those players who are able to change will stay in the race."

"It remains important to accept major changes in the industry such as the merging of IT and AV, the transition from projected to displayed images, or the trends towards smaller group oriented collaboration huddle spaces instead of fixed conference rooms," he notes.

As to where this market is going, Lenz comments, "All indications propose major activities to implement plenty of 4K and even 8K products. The shift from projected to displayed images will continue. The digital signage industry will develop further creative solutions to please the challenging clientele, and thereby grow the business."

However, he also has a warning. "The industry will continue to face a shortage of well trained people, to incorporate all the new technologies in meaningful, more

productive solutions for collaboration, educational spaces and other fields of applications."

That said, in ISE, the industry has a "great show," adds Lenz.

"Comm-Tec has always been a supporter of ISE since the beginning. It is certainly a better way to present product offerings at places close to the customers rather than asking customers to travel far to US-based shows such as InfoComm and CEDIA."

"In order to make ISE a successful event, it has been vital to choose the right individual to make it happen. Mike Blackman has proven that he has been the right man and he has deserved the credits for generating such a success story," he enthuses.

"The concept of offering not only floor space, but embracing the attendees with related programmes in education, business practices and other get-together activities pre, during and after the show has been well accepted. Having worked with Mike as a member of the board for

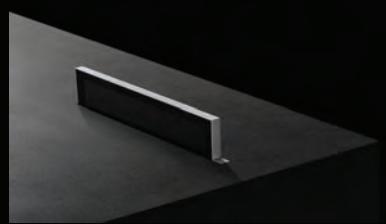
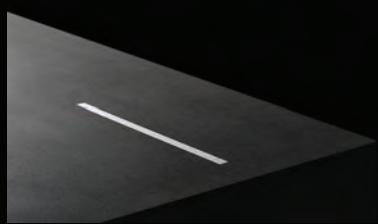
a few years I am convinced that this success will continue.

"It would not surprise me if the attendance grows further during the next few years," Lenz adds. "The extension of the show from three to four days has been well accepted, and will accommodate the growing number of future visitors."

Lenz says Comm-Tec has always returned home from ISE with good results and memories.

"The opportunity to meet many of our existing customers remains important," he says. "Again this year we were able to receive valuable first-hand feedback on many products shown for the first time. Many recently-founded companies showed up, because the event offers all the contacts they need to become successful."

"From a personal angle ISE is very important, to network with friends, and encounter important players within our industry," he adds. "ISE offers great opportunities to meet them and refresh the relationship."



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# THE FUTURE WORKPLACE IS ALREADY HERE

**Tim Stone**  
VP Marketing, EMEA  
**Polycom**

“

Ease of use is one of the key drivers, and has been one of the key barriers in the past, to video adoption

”

**By Lindsey M. Adler**

In terms of futuristic technology trends, perhaps none are closer to full realisation than that of the workplace. Tim Stone is in the enviable position of being very passionate about flexible working and workplace of the future type initiatives, and it happens to be his job at Polycom to be just such an evangelist.

Leading the EMEA marketing team at Polycom for the past four years, Stone helps people to understand how technology can improve their work-life balance and how teams can collaborate more effectively.

At ISE, his session at the Unified Communications Theatre was ‘Workplace of the Future’. While defining this concept, Stone took a deep dive into the market trends and opportunities, from migration to cloud architecture to the focus on smaller ‘huddle’ rooms where video technology is now accessibly cost effective to organisations of all sizes.

Additionally, the growth of Microsoft in the workplace and collaborative technology field has been a key influencer on wider product development.

Stone focussed on three main pillars for his presentation. First is the workspace.

“This is really the ability to deliver video from a mobile device, from a tablet, from a PC,” he explains. “How you can connect from any workspace to any device in a high quality experience, and also share content between those environments.”

Next is the experience, which is all about making the technology simple in every way. “Ease of use is one of the key drivers, and has been one of the key barriers in the past, to video adoption,” Stone notes.

Thirdly, the ability to integrate with other applications is impacting everyday workflows. Microsoft Office and Skype for Business are the most common examples, including the ability to schedule a meeting and book a room via Outlook, along

with escalating an instant message to a video. These applications are designed to happen seamlessly today. Stone also discussed some newer technologies like noise block, a great tool for planned offices to screen out background noise, and facial detection, allowing cameras to frame the room and zoom in on people.

Stone concluded his session by pointing to some real life use cases, including NATO’s command and control uses in a very highly secure environment. He also added some proof points around the theory of workplace advances, identifying cost savings on equipment and productivity gains as real metrics for success.

Stone says a reason that the workplace of the future presents such a great opportunity for AV professionals today is that many of the barriers that existed just five years ago have largely receded. Complicated controllers have basically been replaced by Outlook scheduling and single touch controls

in a room. High quality bandwidth, while still a challenge in many rural areas, is widely accessible for the majority of businesses.

‘Work anywhere’ initiatives are a big driver for adoption coming from human resources, adds Stone. “It’s pretty much our number one enquiry today when we handle incoming leads,” he says.

However, security was one of the top three factors CIOs care about most. “We see that making sure that you’ve got a secure architecture for your video and unified communications solution is really critical,” he explains.

When looking ahead of what the future of the ‘future workplace’ is, Stone points to consumer applications like voice control, Amazon Echo and Alexa, artificial intelligence, and Google Home. “That side to technology will find its way into these kind of meeting rooms,” he predicts. “Those sorts of consumer applications and tools are changing the user’s expectation on ease of use.”



# 4K IS JUST THE BEGINNING

## Piet Candeel

Senior Vice President, **EMEA**  
**Barco**

By Ian McMurray

For those who have been involved in the projector industry over the past decade or two, the advent of flat panel displays with outstanding image quality and at affordable prices must have seemed worrying at best, and threatening at worst. But the industry has reinvented itself – first, with UST lenses that enabled projectors to serve new classes of application, and subsequently with new illumination sources that have addressed projection's cost of ownership issue.

"While the light bulb has been the dominant technology in projector illumination for a long time, it was not ideal in terms of lifetime and energy efficiency," believes Piet Candeel, senior VP, EMEA at Barco, a company he joined over 30 years ago. "Then LED illumination came, and now there's laser."

"Laser is the new lamp, as laser technology offers the same benefits as LED, yet outperforms it with

higher brightness and a broader colour gamut."

"The uptake of our laser projection portfolio, which is expanding all the time, is impressive," he continues.

"In addition to laser, we also see an increased demand for 4K resolution capable products," observes Candeel. "And 4K is definitely not the end. The need for more pixels, driven by applications such as large scale projection mapping and virtual reality, will bring 8K, or even 20K resolutions. Soon, the delivery of the content we're displaying will be the challenge, rather than the capability of our systems."

"Also, we are, as an industry, embracing IT technologies – a change that will enrich the industry and allow new players, applications and business models to emerge," he adds.

What else does he see as being important in 2017 and beyond?

"We shouldn't forget the trend

towards collaboration," Candeel answers.

"Instead of video conferencing, we now have BYOD solutions, which are amazingly easy to use, to exchange insights, both live and remotely. The uptake of collaboration systems is sure to boom; even governments and educational institutions are picking up the trend."

Like many of his counterparts at other companies, Candeel sees ISE as an ideal opportunity to strengthen bonds with existing partners.

"I also believe it can boost our sales pipeline significantly," he adds. "That's a major objective, but it's certainly not the only reason we're here at the RAI. ISE simply is the place to be for the AV industry – a must-attend event for those who want to keep up with current trends and experience just how quickly the industry is evolving. In the case of Barco EMEA, ISE always results in an immense turn-out."

In fact, four of Candeel's

“

Soon the delivery of the content we're displaying will be the challenge, rather than the capability of our systems

”

colleagues were presenting at ISE this year on a range of topics from the use of laser videowalls in control rooms to the role of wireless in collaboration.

"At ISE, I make sure to not only visit partners, but companies from related industries as well," he continues. "I connect with them, always scouting for new opportunities. There are so many innovations to be discovered and opportunities to grasp."

"At our stand, ISE visitors get to connect with Barco sales, as well as with colleagues who know all the ins and outs of our solutions."

"The trade show is a great way for the people behind our products to connect with the industry, gather new insights and feel the overall ambiance. In fact, ISE is always a wonderful four days for all of us – meeting up with the Barco family, sharing amazing stories about what we've learned so far and feeling the vibes of the ever-changing AV world."



**Nancy Knowlton**  
CEO and Co-founder  
**Nureva**

“

Integrators are the key channel for us in the solutions that we are creating

”

# MAKING ROOM FOR COLLABORATION

By Ian McMurray

If you're one of those who thinks that collaboration is one huge but amorphous market, Nancy Knowlton would probably beg to differ.

"I don't really believe that there is a 'collaboration market,'" says Knowlton, who co-founded Nureva in 2014 with her husband, David Martin, having previously co-founded SMART Technologies. "The variation in collaboration offering is just too great to really call it a market per se. Collaboration has become an umbrella term that encompasses a variety of activities, some of which are passive, some active."

She goes on to note that Nureva's Span - a cloud-based system that turns whole walls and rooms into collaborative workspaces - is a tool that addresses specific business processes related to active creation and problem solving, rather than a

general tool for presentations or meetings.

"Integrators are the key channel for us in the solutions that we are creating," she adds.

"There are three ways that integrators can add value in the collaboration space," Knowlton explains. "First and foremost is acting as a trusted advisor to their customers, bringing new solutions that address their customers' evolving needs. This means taking a consultative approach and deeply understanding what customers need to achieve, and helping to deliver the solutions that they need. Second is through professional installation and support services, ensuring systems are always ready to use. And, third is through professional services that develop the skill to use the available tools. This latter point is particularly important for software tools that support business processes."

"There are significant opportunities for targeted solutions that enable customers to be successful with their priority processes," she continues. "Success will be dependent on the combination of hardware, software and services. Cloud services, and supporting remote participants, will be key customer requirements in all solutions."

Knowlton and her husband have been confirmed ISE attendees for a decade or so, and this year she was delivering a session on the relationship between collaboration and business skills, while David Martin was presenting on how meeting room design and dynamics are changing in response to evolving needs.

As a relatively new company, ISE is, as Knowlton acknowledges, a key element in addressing two of the challenges her business faces - broadening awareness of Nureva

and its solutions, and building out a capable, global channel.

"ISE is the premier global event for us," notes Knowlton. "It's a great chance for us to engage with end users and our channel. It's also the perfect venue to continue our channel recruitment for Europe and other international locations."

As to what makes ISE such an ideal event, she says, "The timing is great from a product announcement perspective. The beginning of Q1 is substantially better than the end of Q2. The permanence of the event at the RAI in Amsterdam is also important from a planning perspective. It is easy for people/companies to plan their attendance and activities versus having to move from venue to venue each year. Finally, travel for European attendees is just so convenient, so it's most likely we can connect with the people we want."

## Tobias Lang

CEO  
Lang

“

Visual presentation technology is always changing

”

By David Davies

ISE 2017 saw visual presentation technology specialist Lang not just looking to the future, but also taking stock of what has - by any standards - been a hugely eventful year in terms of its solutions offering and European presence.

"The last year has been full of exciting developments," says CEO Tobias Lang, alluding in particular to the significant progress made by the company's Solutions4AV department with its GhosT-OLED solution. Designed to suit eye-catching applications in retail, museums and fairs, the transparent GhosT-OLED displays offer the opportunity to both visualise content and look through the display into the room behind it.

Lang also highlighted the decision to establish new companies in the UK and Switzerland, the latter as the result of a collaboration with Baranday.

"All three companies have one thing in common: we all follow the same philosophy, now and in the future," he says. "We only do B2B, and no B2C business, which ensures we have long customer relationships. We all act on the same level, even though all three companies are independent."

It's a philosophy that was clearly established under Lang's founder – and Tobias's father – Paul Detlef Lang. Having joined the family firm 12 years ago, Tobias took over from his father three years later. As well as continuing to develop the company's international profile and product

range, he also has broader influence as a member of the supervisory board of Integrated Systems Europe.

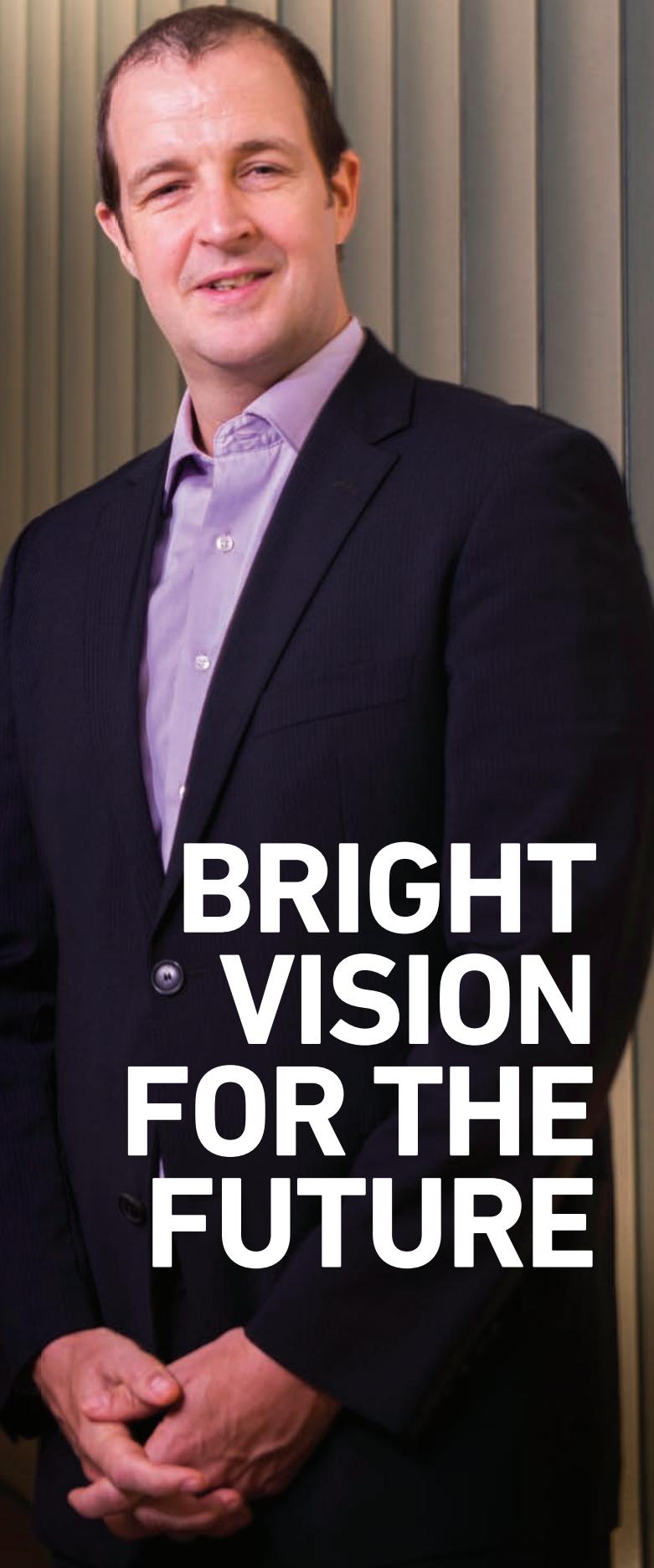
The portfolio of visual presentation solutions that the company offers is "always changing", he says, adding this is to be expected when one considers how many new technologies have emerged within the space over the last few years.

"In addition to the slow but steady movement towards 4K UHD in all product categories, solid state illumination (SSI) projection has been continuously growing in value and quantities for the past [few] years," he says. "Other great new applications and solutions were developed after the arrival of organic LED technology in the professional display market. Last but not least, the introduction of Epson's 3LCD laser projectors has changed the area of visual presentation technology."

A number of these developments were reflected on the company's massive stand at ISE, where Lang highlighted a number of developments around OLED. "Recently this technology has been evolving exceptionally and will be important for the market in the future."

Looking ahead, Lang is enthused by the potential of UNNP (Ultra Narrow Pixel Pitch) LED walls, and the new generation of wallpaper display solutions geared towards pro-AV.

"It is a very eventful time, and I am very excited about a variety of upcoming technologies," he concludes.



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# ALEXA OPENS THE DOOR FOR SMART HOMES



**Paul Williams**

Vice President of  
Product Management  
**Control4**

By Ian McMurray

If you've been around the AV industry for more than 30 years, as Control4's Paul Williams has, you can't fail to have noticed the accelerating growth in interest in the Internet of Things (IoT), and exactly what it might mean. Certainly, more exhibitors and visitors than ever before were talking about it at this year's ISE.

"The IoT has dramatically changed the way consumers think about technology and has led to significant increases in adoption of technology by consumers," he believes. "This change is also radically altering business models with regard to how technology is being integrated into people's lives. As the smart home becomes more popular with homeowners, products will need to continue to evolve to meet the needs of the greater IoT."

For many in the industry, that consumer awareness is something of a two-edged sword. It breeds interest, opportunities and purchases – but what products will consumers

buy? The ready retail availability of lighting controllers, smart power switches and so on – not to mention the 'Alexa Effect' driven by Amazon – is potentially a real challenge for manufacturers like Control4, and for smart home integrators.

"There are a lot of DIY solutions in the smart home market," Williams acknowledges, "but installed home automation provides higher quality and more dependable products that are less likely to run into problems. It also offers access to experienced dealers who can proactively identify and solve any issues that come up along the way. Conversely with DIY products, customers are left to figure out problems on their own or receive assistance from service lines that may not have the level of product knowledge that a trained dealer offers."

Among his other commitments, Williams was at ISE to present a session on the impact of the IoT/smart homes market, and how innovative business models can positively impact integrator profitability.

"It's important for integrators and custom installers to ensure that they are constantly staying abreast of the latest trends and offerings for customers," he states. "2017 will continue to see an increase in the use of voice control that began last year. It opens the door to even more convenience in the smart home and it will continue to become a form of control that consumers increasingly rely on and expect in 2017. We see voice control as the next big feature of a truly smart home – which is why Control4 offers whole-home voice control integration with Amazon's Smart Home Skill API [for Alexa-enabled devices]."

Network management will be another emerging trend as more consumers continue to add more devices to their smart home system, according to Williams. "We've seen increased interest from consumers in high-resolution audio and streaming music, and believe that's going to continue to grow in 2017. That makes network management even more of

IoT has dramatically changed the way consumers think about technology

a necessity for dealers because more homes are relying on connectivity, even without home automation systems. More than ever, dealers are going to need to be able to tap into the system remotely to see the status and performance, and diagnose or fix issues on the network in real-time."

Even given these challenges, it's an unquestionably exciting time to be in the home automation market – and at ISE. For Williams, as for many of his counterparts across the Atlantic, the show represents an opportunity to find out what's going on 'across the pond'.

"ISE has become the go-to EMEA industry show for the AV marketplace, and a great place for us to grasp a firm understanding of the trends our key dealers in the region are seeing in the smart home and AV market," he affirms. "I've been coming to ISE since 2008, and the biggest change I've noticed is that the size and scope of the show has increased dramatically. It's become a launching vehicle for products attuned to EMEA as well as the global market."

# A MAGNET FOR END USERS



By Ian McMurray

ISE isn't just about manufacturers and resellers. It attracts professionals from every link in the AV chain – all the way to the thousands of end users who make the annual pilgrimage to Amsterdam in February. Owen Ellis is one of those end users – he has global responsibility for the design, implementation and maintenance of all audiovisual systems at one of the world's most prestigious financial institutions.

Ellis has overseen numerous large projects, including the migration of videoconferencing services to IP, the implementation of advanced remote support tools, as well as the fit-out of new offices in London, Hong Kong and Tokyo. Prior to his current assignment, he spent 15 years with the Metro Group in a variety of roles including service,

sales, event hire and installations, followed by a year with Electrosonic as senior project manager in the corporate and retail installation team.

This year, however, as for the last few years, Ellis is wearing a second hat – that of chairman of the AV User Group (AVUG), a thriving community of over 500 end user members. Ellis joined the AV User Group in 2004, and has now been chairman for seven years. He has overseen its expansion – first to New York and, in April last year, into Hong Kong.

"In October, we held another successful meeting in Hong Kong," Ellis notes. "I think we can now call ourselves a truly global organisation. 2016 also saw us revamp our web site as well as extend our social media presence via LinkedIn and Facebook." For him, as for many of his members, ISE is a 'must attend'

event, and he believes he knows what compels many of them to be at the RAI.

"ISE has become the launch pad for many of the manufacturers' new products and services, and so it's important to be here in Amsterdam each year to keep up with these developments," he says. "It's also an incredibly valuable industry networking opportunity because of the quality of the European AV industry that's in attendance."

This year, Ellis also had a more formal role in addition to his fact-finding, moderating the 'How AV can enhance the user experience' conference.

"We've had some excellent sessions with speakers from Arup, Barclays and Google on subjects including fitting out a new facility, managing ROI, and the influence of IT on the AV industry," he explains.

Attracting speakers of that

**Owen Ellis**  
Chairman  
AV User Group

calibre is testimony to the esteem in which ISE is now held – and Ellis has noticed how the show has developed over time.

"I've been attending for around ten years now," he continues. "Obviously, it's grown in size and attendance, and I believe its success has been a result of a number of factors. Not least is MD Mike Blackman's tireless efforts in partnership with InfoComm and CEDIA, but also the location at the RAI in Amsterdam which is central to the region and has great transport links. It's also an attractive city to visit and has plenty of locations and opportunities for the type of events that many of the suppliers run for their clients alongside the show."

"In fact, there's probably only one thing I would change about ISE – and that's the weather," he laughs. "Amsterdam can be bitterly cold at this time of year."

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# SMART HOME FEEDING FRENZY

**Ollie French**  
Director  
**Future Automation**

By Heather McLean

Director at Future Automation, Ollie French, arrived in the residential AV space through a chance meeting. This was not an industry on his radar, he says, until a conversation with a custom integrator who was making his own TV mounts to fill a gap in the market alerted him.

To satisfy the need for the required quality and functionality of products in the custom integration industry, Future Automation was set up, just as flatscreen televisions became more mainstream and the public found that mounting solutions for them were not as widely available.

"I was attracted [to this sector] by the creativity, and passion of the industry," comments French. "There was a desire to achieve

unique solutions for clients and to push the boundaries of what they thought could be done."

"The essence of Future Automation was to be the integrators' workshop, ready and willing to make anything they needed to get their clients' vision achieved," French continues. "This has remained a core value and as the business has grown, and we have kept true to our solution-based approach to making products for our clients. It has been a fun journey and one that continues to grow and evolve."

French is "intrigued to see how voice control and virtual reality are integrated into everyday life in the residential space in the coming years".

He continues, "I think we will see further jostling for position by the larger tech companies, who are all

looking to gain more penetration into the smart home. The challenge then for many manufacturers will be how the smart home is chopped up by the technology giants, and how we can ensure we are all staying relevant and important in this space to our clients."

"ISE 2017 shows that the industry is in a healthy place," he adds. "The pace of development in video is phenomenal and very exciting, and this offers opportunities in both residential and commercial channels".

Noting the growth and recent evolution of ISE up to the present successful event, French observes, "The show has changed in scale and scope over the last decade, but at its core the values of promoting collaboration between supplier and customer, and innovation in technology, have

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We will see jostling for position by the larger tech companies, looking to gain more penetration into the smart home

”

remained the same. While the main protagonists' booths have grown in size, there are still new companies debuting at the show each year with new innovative technologies that are key to the AV space.

"I believe that the show has become a great platform to launch new technologies and products to an educated and professional audience who are eager to seek new solutions," he continues. "I hope in the future that the show is nurtured to ensure that companies large and small can all have their message heard."

"It really has become a global event rather than a European show; we are seeing more and more customers from North America also attend," concludes French. "The show covers a wide range of sectors and technology that you can't get from other trade shows."

# CLEARING THE AIR

**Rich Zwiebel**  
Vice President  
**Systems Strategy**  
QSC Audio Products



Enterprise-wide solutions will drive developments for years to come

By David Davies

As a driving force behind the development of CobraNet through his time with Peak Audio, and an enduring influence on audio networking technology ever since, it is hardly surprising that Rich Zwiebel has latterly become a renowned authority on AES67. That authority is in demand, as the Audio-over-IP interoperability technology has been one of the industry's hottest topics since the standard was published in late 2013.

At ISE 2017, Zwiebel delivered a range of presentations examining the objectives and implementation challenges surrounding AES67, aiming to provide much-needed definition to the industry-wide AoIP debate. He also related the technology to his own latterday roles as Chairman of the AES67-promoting

Media Networking Alliance, and as Vice President, Systems Strategy, at QSC.

"The aim [at this point] is really to clear up any misunderstandings there might be around the standard, and underline the point that it is all about interoperability for existing networks, as well as talk about some of the specific opportunities for implementation," says Zwiebel.

In terms of QSC itself, Zwiebel notes that the company "totally embraces" AES67 and points to new developments such as the Core 510i processor, which was showcased throughout ISE 2017. An evolution of the Q-SYS technology platform, Core 510i can be configured as a full Q-SYS audio, video and control processing appliance – or as an I/O peripheral that can accommodate any combination of Q-SYS analogue, digital and networked audio I/O

cards. AES67 is among the many audio I/O configuration options.

In what was a notably busy show for QSC in terms of new launches, the company also drew attention to a number of other developments surrounding Q-SYS. These included Q-SYS I/O-8 Flex – billed as a compact PoE+ capable networked peripheral for audio, control and USB extension – and the first-look at a new collaboration with Dell. This latter initiative featured existing Q-SYS software being run on off-the-shelf Dell server hardware – the intention being to highlight the shift from standalone proprietary DSP hardware towards a scalable and standards-based IT platform and architecture.

Zwiebel says these developments underline QSC's continued evolution of "an enterprise-wide solution that really solves the needs of people

who require audio, video and control throughout a facility. That has really become a big focus for us, and I think the [issue of how best to achieve that] will drive technology not just today, but for the next few years."

He therefore expects the QSC range and Q-SYS platform to continue to resonate with core applications such as stadiums, theme parks and other visitor attractions, but also with some newer markets like meeting spaces. "There are a lot of projects coming out this year focused in that area," he says.

Meanwhile, Zwiebel continues to be impressed by the sustained growth of the ISE show. "If you look at the trajectory of this event it is quite remarkable," he says. "We have all watched it grow a lot in terms of scale and sophistication, and that has been great to see."



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