

4<sup>TH</sup> QUARTER 2017

# JOURNAL

103

REPRESENTING BROADCAST AND MEDIA TECHNOLOGY SUPPLIERS WORLDWIDE

**2017**

**The year of creative  
collaboration**

Also inside

**Executive viewpoint – John Ives**

**Follow the money**

**How to stop fraud**

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Featuring supplement of  
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# Creative collaboration – together we're stronger



**Peter White**  
CEO, IABM

Welcome to our bumper end of year Journal. This year we've added some highlights from 2017, a review of some of the highlights from this year's Annual International Business Conference and a further bonus – the December 2017 Quarterly Business Digest. As a result it's packed full of actionable information – not only reminding you of the ever-growing array of IABM activities to elevate business, but also giving you some extra insights from this year's Annual International Business Conference alongside a number of thought-provoking articles on business, technology and applications.

In the Q4 2016 edition of the Journal a year ago, I quoted David Ingham, Associate Partner M&E, IBM, who said: "The industry will never change this slowly again!" David was right; everywhere one looked in 2017, there was disruption, change and innovation – across technology, business models and the businesses themselves; we were being bombarded from every direction. However, you can track all of these changes back to one thing – money. 'It was ever thus' I hear you cry – yes, but not like this. Charlie Vogt put his finger on it at our State of the Industry Conference at IBC this year. It's about *'following the money'* he said – and during 2017 that trail led straight to where the new power, and so the money, in our industry lies: with the audience. To keep up with its rapidly changing appetites, technology vendors need to work more closely than ever before with end-users: creative collaboration is the only way forward.

This was very much the theme at this year's Annual International Business Conference, which ran under the banner 'Elevating Business: Media and Technology Working Together'. We refreshed the format this year to make it more interactive, and bringing senior broadcast and media company executives into the conversation on the first day proved to be highly valued – by both members and the B&M executives. The conversation ranged

across standards and underlying technology drivers such as IP, cloud, microservices and AI, illustrated by real-life case studies. And we learned about integrating social media into the sales and marketing process, how end-users like to be sold to (they don't!), and how salespeople can instead transform into trusted advisors. New this year was the Dragons' Den, where some great ideas were pitched at breakneck speed to an enthusiastic reception; it looks set to become a regular conference fixture.

We also spent some time at the conference explaining how the wide range of business intelligence IABM produces can be harnessed to help drive good business decisions. This year we reinforced our in-house analyst team to enable us to go deeper and wider in our business intelligence services for members. We have also overhauled the format of the reports to make them more easily referenced; you will notice this as we release the next editions in the near future.

Still on the important subject of business intelligence, we introduced GMVR Essentials in September. Using individual category data from IABM DC's industry-leading Global Market Valuation and Strategy Report, GMVR Essentials enables every broadcast and media technology company to access critical information on just the individual product and/or service

segment(s) in which their company operates – at a price that I think makes compelling sense to underpin business planning.

Looking forward, I can confidently predict that 2018 will be another year of breathtaking change. With SMPTE ST2110 now largely ratified and IP plug-and-play becoming a reality, the move to the cloud gathering pace, DevOps increasingly the only choice, and AI finding increasing applications across every part of the content creation, production and delivery chain, exciting new business opportunities will quickly unfold. Blink and you may miss out – and that's where IABM comes in, providing valuable, comprehensive information, forums, support and services to help you drive your business forward. In the accompanying article on page 14, you can read about the wide range of initiatives we are bringing to members in 2018 – all designed to help you do better business in this fast-changing world.

We look forward to working with you in 2018. It will be the year the whole industry moves forward together, and IABM will put its heart and soul into providing a unique platform for creative collaboration between broadcast and media technology suppliers and users that will be good for business.



**The future is bright  
but different!**



# Executive viewpoint



**John Ive**  
*Director Strategic  
Insight, IABM*

It's clear to everyone in the media and broadcast industry: the environment is changing and it's more revolution than evolution. Figuring out the way forward is more difficult than ever because in times of significant change there is disruption – the future is no longer an extrapolation of the past. Our eyes have been opened to new possibilities and there's no going back.

What makes this period unique is the way it affects every aspect of the industry from creatives through to technical and managerial. We are into uncharted territory and everyone is watching for clues as to the direction the future will take.

Until recently technology has been a driver of change, which meant that what technology allowed us to make shaped operational and business developments. A good example of this is the transition from analogue to digital and the advent of the digital video tape recorder. This was a point device that enabled multiple generations in the digital domain. It solved many of the weaknesses associated with analogue recording and was at the heart of a significant industry change. However, throughout this process most of us could see where it would lead and could plan accordingly.

Technology is no longer a driver in the same way – it remains vitally important but is more of an enabler. Technology advances no longer trigger single point solutions but open up a plethora of possibilities and options.

## The old ways are broken

For many of us, intuitive and logical thought processes lead us to optimise the existing status quo rather than thinking out of the box. Take for example a reasonably complex product. When it is first launched, it may be a breakthrough, but in its first iteration there will be shortcomings. Smart and responsible companies then listen to their customers either directly or through user groups and hear what's liked, what's not and what features are missing.

As a responsible company the designers set about correcting and improving the product, adding a new feature, correcting an operational problem, removing the cause of a software crash and so on. This process is repeated throughout the product's lifetime, aiming towards the perfect product. Seems like a reasonable approach but there's a flaw. Being obsessed with improvement inhibits thinking 'out of the box'. Continuous product improvement follows a law of diminishing returns despite escalating support costs. Once the product has peaked and market penetration is high

there is a diminishing return on investment. Some companies have found that by the time they have achieved the perfect product, having diligently responded to customer feedback, the reality is that the industry no longer wants that product at all. Operational requirements have changed, and alternative radically new approaches are now preferred.

Freeing development minds from building entirely on past tradition and experience is neither comfortable nor easy but necessary to stay relevant. This is what Apple did so successfully during its meteoric growth period. It did spend a proportion of its effort on improving existing products, but allocated resources searching to find something completely new and surprising.

### Commoditisation changes everything

Lowering prices for technology mean lower margins and that only makes sense if the market can be expanded to compensate. This is a real challenge for an industry built upon high value capital items and small volumes. Technology that was once the exclusive preserve of large broadcast organisations is now available to the masses at consumer prices. This influences every aspect of a technology supply company.

Technology change and its influence on product, services and then operational use is important. Many decades ago the transistor was the device that revolutionised electronics. Product engineers needed to understand how transistors worked and at that time revolutionary products appeared.

*Technology is no longer a driver in the same way – it remains vitally important but is more of an enabler. Technology advances no longer trigger single point solutions but open up a plethora of possibilities and options.*

*Apple did .... spend a proportion of its effort on improving existing products, but allocated resources searching to find something completely new and surprising.*

Then came the integrated circuit and the transistor (still a component of integrated circuits) was something most engineers no longer needed to understand.

The message here is that what was once a component (the transistor in this case) becomes part of a system (the integrated circuit) and then the system becomes the new component. With each step change we become more ambitious as

systems become components. But each evolutionary step requires a determination to disrupt the current status quo.

That trend is continuing and raises questions for technology vendors. Potentially larger markets are opened by commoditisation, but they cannot be addressed with a high value low volume business infrastructure. Also technology evolution is turning previous point products to components of integrated systems with phenomenally enhanced capabilities.

Counterintuitively, the high value market remains – there is always a need for large enterprise systems – but the nature of that business is very different too. In the spirit of components becoming systems, the high-end market wants to address their challenges and achieve much more, orders of magnitude more, with new resources. Expensive single function hardware is no longer attractive, the lure of the Cloud with instant scalability, limitless compute power and pay per use is a revelation too attractive to pass up. It fits the new business models and puts the power back in the hands of the management. The technologists remain important but like the technology itself they are enablers and no longer drivers.

Cloud provision and IT systems are totally different business domains, so it's not reasonable to expect a point product hardware provider to challenge the large IT based companies with the provision of IT, data centre hardware. So, a new role needs to be defined providing solutions based upon value added software.



### Consumers are the drivers

Consumers can make or break business models more now than ever before. Like their professional counterparts, they have options and because there are so many options, they need to be selective. A new service therefore needs to capture the hearts and minds of consumers with many failing to get traction. Also, consumers have professional grade technology in their hands, and they expect professional performance and user experience. Attention spans are too short to spend time fathoming a non-intuitive user interface.

We are all consumers and the great strides in user experience influence expectations in the professional world. Professional products have often been functional, reliable but not always intuitive or attractive to interface with. Professionals have prided themselves in understanding how to 'drive' these specialist-only devices. An intuitive and attractive user experience is becoming increasingly important at the professional level, especially as time for training is limited, so rapid familiarisation and intuitive working environments are critical to success.

### The broadcast market is not big enough

The industry cannot adopt these new developments and adapt business models unless the market grows to support it. Depending upon the demographics, some sectors are seeing consumers viewing more video but less conventional scheduled television. For the younger demographic, research indicates this can be up to two and half times more non-broadcast video viewed on average.

We are also using video to replace the printed word for training, gaming, sport, information, promotion, instructions and much more. As these sectors rise in production standards, they need to be included in the professional domain, to support the required increase in business volumes. Some relatively new companies are developing products spanning several disciplines, but established companies are struggling to make the leap.

### Spare a thought for the creative

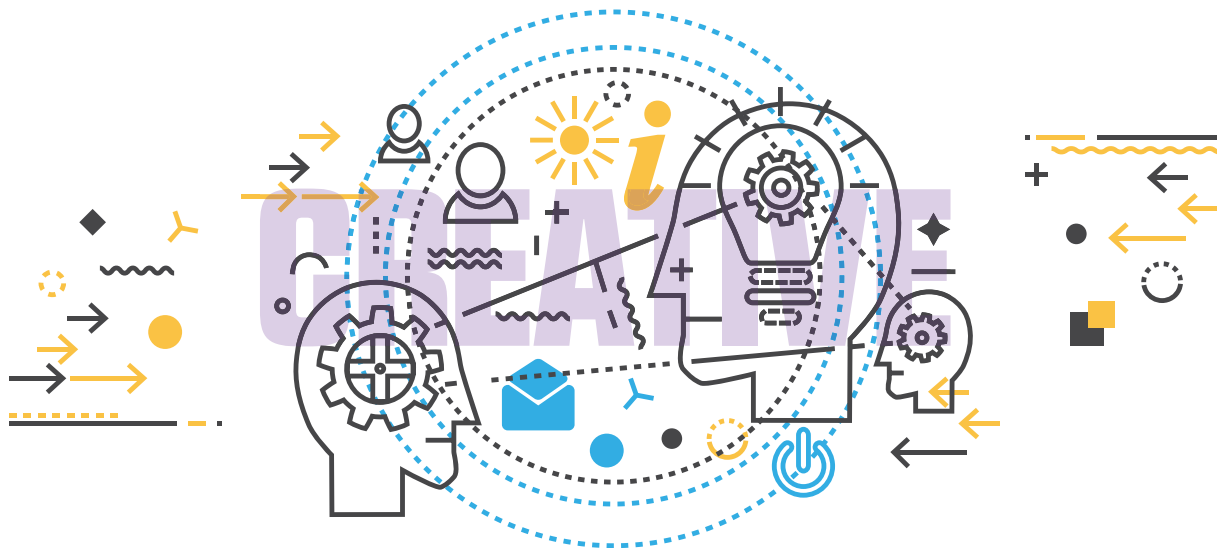
Money is being channelled into technology – especially video distribution and the different viewing options. There is a danger that we

forget what the real industry driver is: content. Creatives are having a hard time as large companies stick with safe formulas and spend large sums on a few high production value projects which are viewed as safe investments.

There is a lot of repurposing and repackaging of existing content, but we need new, fresh and exciting programming to stimulate and excite us. This huge infrastructure that we are investing in to see anything, anywhere, anytime, needs quality content. So, while we are grappling with the technology and how to transform our business models, we also need to spare a thought for the content we all ultimately depend upon and how to support innovative and creative new talent.

### In conclusion

The future is bright, especially if we think 'out-of-the-box' and grasp the opportunities available. There are two very different business sectors emerging, the large corporate infrastructure which will become IT and data-centre – focused and the smaller operators who will contribute to making an expanded market for increasingly commoditised products. Which one will you align with?



The USA's largest cable TV provider - which represents around 95% of the cable market - had 48.6 million subscribers at the end of March this year while Netflix had 50.9 million customers

# Technology changes the definition of Broadcasting signal flows



**Stan Moote**  
CTO, IABM

In the early days of broadcast, radio and television, we always had a transmitter to send a program over the air to many receivers. We always referred to the radio or television station as a broadcaster.

Technology brought in cable TV and satellite; broadcasters had another method to transmit their signal, although it was still the same program as the one that went to the TV via the over-the-air transmitter. Then so-called cable and satellite stations started to appear. These were clearly different as they were often pay or niche services and not transmitted over the air. Sometimes this was due to license avoidance in various parts of the world, and other times they wanted to take advantage of having a subscription service that was not readily available with over the air technologies. So how does the internet and social media fit into this?

While the word broadcasting has come to be commonly accepted over the years as meaning 'one-to-many via a transmitter', a true definition of the term is 'to cast or scatter in all directions'. This leads me to believe that delivery via the internet fits within this meaning too. So what is the resistance to calling any form of program delivery broadcasting? It appears to come down to the concept of 'on-demand'. Broadcasting is considered as linear programming and on-demand is, by definition, non-linear programming.

So why restrict the meaning of broadcasting? OTT (using the internet to send video) has progressed to include distribution of live content. Perhaps it is not always 100% as reliable as traditional transmission, however this is rapidly changing. Can you expect your TV to work if you have a poor antenna or cable system connected up with bad coax, or trees waving with the wind in front of your satellite dish? Certainly not, so why should you expect OTT to work over unprovisioned networks? (Unprovisioned networks use best effort and may get

overloaded, so become very slow). The fact is we do expect this, and frankly due to recent improvements with MPEG-DASH and caching, it is amazing how reliable Internet delivery has become. That being said, viewers still of course need to have a reliable Internet service at their end, just as they need proper antennas and coaxes for OTA, cable or satellite delivery. OTT set-top-boxes, dongles and smart TVs are rapidly taking over traditional distribution even for linear programming.

According to Leichtman Research Group, the USA's largest cable TV provider - which represents around 95% of the cable market - had 48.6 million subscribers at the end of March this year while Netflix had 50.9 million customers. Compare this to five years ago where cable had more than double the number of Netflix subscribers. Netflix stated

clearly this year that it is not heading into providing live streaming.

We need to get over the mindset of broadcasting versus on-demand. Most linear programming has been well prepared and stored up on a server waiting for its time-slot to be aired. Essentially the only reason it is not on-demand is purely for the purpose of paid advertising timeslots; whether I watch it from a transmitter (at the appropriate time), stream it live or see it later - it is still the same program being 'broadcasted'.

My point is any type of program distribution from now on should be considered as broadcasting. Even die-hard broadcasters now cater to OTT feeds for catch-up or mobile viewing of linear feeds. The issue at hand is no longer the technology used for program distribution; it is strictly on the business side. The business side is

*We need to get  
over the mindset  
of broadcasting  
versus on-  
demand.*



IDATE forecasts that the global video on demand sector revenue for 2017 will be €34bn with €25.2bn of it being from OTT (i.e. over the Internet)

currently stressed over this concept and as vendors to the M&E community we can partner with broadcasters to help find profitable solutions for them.

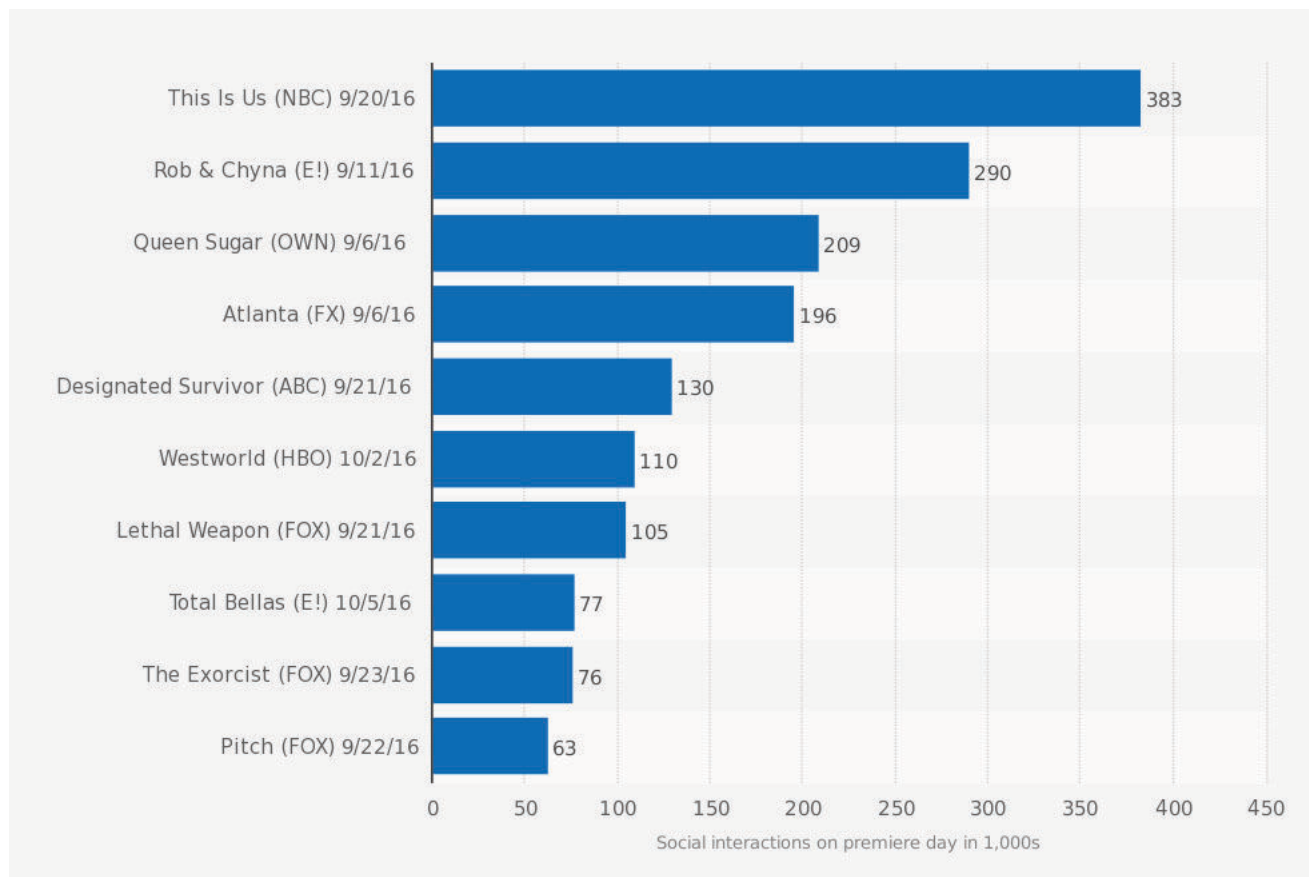
Just a couple of stats to put things into perspective. IDATE forecasts that the global video on demand sector revenue for 2017 will be €34bn with €25.2bn of it being from OTT (i.e. over the Internet). Big numbers! However, IDATE also forecasts that 'managed linear' will still account for 82.3% of global TV industry revenue in 2022 regardless of the delivery path, with on demand just 17.3%. Whatever you call it, managed linear is not going away any time soon – despite the continuing explosion of on-demand services and viewers.

Social media and television work both ways. Research found that in the US tweets cause an increase in viewership 29% of the time, and viewing TV programs

causes Twitter chatter nearly half the time [48%]. Many traditional broadcasters are struggling to be profitable with any type of social media activity. However, once a broadcaster figures out the right social media activities that can drive more viewers, there is more money to be made.

Neilson studied TV series premieres during the 2016/2017 season in the United States. (See chart below). They measured the amount of total social TV interactions on Facebook and Twitter. NBC's 'This is Us' was the most popular premiere week show, with 383,000 interactions. This isn't true with every TV program. The key is still having good, solid programs.

**Bottom line – the fact still remains that content is king, not how it gets distributed. So why not consider calling all types program distribution – Broadcasting.**



# Following the money

## Report from the IABM State of the Industry Conference at IBC2017



**Roger Thornton**  
IABM

IABM's State of the Industry Conference has become the traditional curtain-raiser at IBC, with a panel of industry experts discussing the big industry issues of the moment and providing pointers for where broadcast and media is heading next.

The 2017 event didn't disappoint, ranging across the cloud, efficiency drivers, OTT, consolidation and business transformation – and the shift of power to the viewer.

Panellists were:

**Tony Emerson** – Microsoft;  
**Muriel de Lathouwer** – EVS;  
**Jeff Rosica** – Avid; **Charlie Vogt** – Imagine Communications;  
**Chris Wagner** – NeuLion; and  
**Peter White** – IABM, under the chairmanship of **John Ive**, IABM.

### Consolidation without – and within

Consolidation is on everyone's lips at the moment with a regular stream of big mergers featuring a mix of broadcasters, distributors, content owners and media companies being announced. Peter White noted that: "there is consolidation happening on both the supply and end-user sides of the industry; profit margins are just not there anymore – business models need to change. On the supply side, consolidation is driven by bigger companies looking for the

small company innovators. It's all about efficiency going forward." Tony Emerson agreed, adding: "the media industry is fairly healthy despite the ongoing consolidation and change. There are lots of opportunities for managing the supply chain – and we haven't put this management in place as quickly as the processes themselves are changing. The new players who don't have existing infrastructures just pay someone else."

Charlie Vogt sees consolidation on the broadcast and media company side naturally driving it on the supply side. "How do we consolidate around a customer base that's consolidating around us?" he asked. "100 reducing to 20 puts pressure on us. This consolidation has created a strong, healthy base of customers but put a lot of strain on us – we have to consolidate on the supplier side too."

It is not only consolidation between companies that is driving the quest for greater efficiency. According to

Jeff Rosica's experiences with Avid's customers, they are also consolidating departments within their operations – bringing previously separate 'silos' – social media, traditional broadcast, online etc. – together thanks to new, integrated production tools. Muriel de Lathouwer agreed: "Traditional broadcasters are under pressure – they are having to reinvent themselves to be able to do more with less." It's happening on the vendor side too; as Charlie Vogt noted, "We're doing it now – companies can't afford silos any more."





*“The biggest impediment in moving to the cloud is skillsets. Hesitation on how to do things when you can’t see them is the greatest impediment – not security or other concerns.”* Tony Emerson, Microsoft

### **When will OTT become profitable?**

IABM’s recently published End-User Survey shows a disparity on profit margins between the new OTT operators and traditional broadcasters; margins for the former range from 0-10% while the latter tend to be between 20 and 40%. Will the increase in the viewing options driven by OTT ultimately increase overall revenues or will more players be fighting for the same pot of money? – as Tony Emerson put it, “Is it a zero-sum game? Or will OTT open more revenue streams? It’s not clear yet

whether there will be growth, shrinkage or redistribution.”

Chris Wagner sees definite opportunity: “NBA is followed by one in seven people in the world on social media in 200 countries. These kinds of connections bring a lot of monetisation opportunities. The consumer is driving it, the industry is matching what they want. Passion groups are a big opportunity – some people spend most of their time watching their passion; OTT is enabling this. “What’s driving change is the smartphone – it’s delivering high quality video and meeting the

consumer preference for personalization – driving repackaging. We now have higher quality video over the internet than through legacy channels,” he concluded.

Jeff Rosica acknowledged there is potential for growth: “There’s a limit to how much consumers will spend on content – but we haven’t reached it yet. But we can’t have 100 different platforms – we need to find a reasonable point.” How to reach this “reasonable point” was a subject of debate. “Companies that have huge content are protecting it – Disney is not on

Netflix for example,” said Charlie Vogt. “Companies want to control their own destiny by creating their own platform to attract and retain viewers. We’ve not seen anything yet in online viewership – we’re at the tip of a major change to come.”

### How far can the cloud go?

For Jeff Rosica, moving to the cloud is essential. “On-premise hardware is not the future. You’ve got to be flexible, and ways to connect with new talent and the cloud are key to this. Having your MAM on-premise is crazy. The cloud is an extremely powerful tool, and is more secure – there’s an army monitoring content.” Chris Wagner sees the cloud opening new opportunities as well: “Broadcast commentary in the cloud enables a game to be available worldwide in any language. Do a voice-over using local experts over the video stream to each specific geography. This is what is happening with audio in the cloud. It means great content (because of expert commentary) with far less cost, delivered to new audiences.”

It’s not that easy just to move to the cloud, noted Charlie Vogt, though its benefits are becoming apparent – and proven: “Virtualising a master control center is a big deal. Disney is right now delivering linear content in the cloud today using Imagine technology – it’s secure and robust. Muriel de Lathouwer concurred: “Seamless live IP production is not easy. We have just completed a project with Fox Sports in Australia covering 30 venues from just two hubs. You need incredible infrastructure to do this.”

And it’s not just the technology that’s holding things up according

to Tony Emerson, but Microsoft has one answer. “The biggest impediment in moving to the cloud is skillsets. Hesitation on how to do things when you can’t see them is the greatest impediment – not security or other concerns. Microsoft’s on-premise ‘Azure Stack’ is trying to address this, allowing a progressive move to the cloud.”

*One of the keys to improving efficiency will undoubtedly be AI .... I’m surprised AI is not bigger. Even QA can use it – simultaneous translation into multiple languages. It’s not perfect but smartphone users don’t expect perfect.*

Tony Emerson – Microsoft

### Increasing efficiency

For Muriel de Lathouwer, meeting the needs of an ever more disparate audience depends on how far efficiency can take us. “Everyone’s saying TV is dead and they’re going OTT to address the needs of the new audience cost-efficiently,” she said. “That’s why EVS is offering smaller scale products, with a single operator for all functions in a live production. We need to completely review our way of working and use AI, with humans to add the emotion and context. Do more with less. Use AI to produce different types of production – automated framing etc. – to cater for small screens; reinvent the story for different audiences.” Jeff Rosica concurred: “Whatever the size of the organization, monetization is key – we need to help smaller organisations too. We need to create content much more efficiently for the smartphone world; we need to use technology without throwing people at it to make it efficient and cost-effective.”

One of the keys to improving efficiency will undoubtedly be AI according to Tony Emerson: “I’m surprised AI is not bigger. Even QA can use it – simultaneous translation into multiple languages. It’s not perfect but smartphone users don’t expect perfect. This means you can get into more markets without big extra costs. AI is also enabling scripts to be tagged making content much easier to find.”

**In conclusion, our industry is transforming from a push to a pull model – driven by the viewers. We need to work backwards from what they want – or as Charlie Vogt put it so succinctly, “You have to follow the money – understand where our customers’ customers are spending money.”**



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# Strategies for elevating business – and what IABM is doing to help



**Peter White**  
CEO, IABM

We are in a period of unprecedented change – business, technology and culture are all transforming – and these changes are being driven by consumers. Competition for their attention (and so, dollars) is fiercer than ever; the media and broadcast industry is moving from the traditional one-to-many relationship with its audience to one-to-one engagement, with the terms of that engagement dictated by the viewer. Put another way, we're moving from a 'push' model to a 'pull' one.

To meet this requirement, media and broadcast companies need to concentrate on personalization – delivering that one-to-one experience – and to do this they need agility and to be able to do more with less through automation and efficiency. This need to do more with less is because OTT margins are lower than those of traditional broadcast, and that's what's driving the requirement for more automated, data-driven workflows.

As a result, infrastructure is moving to the cloud, and signal streams to IP; technology demand has changed, affecting vendors' business models. Via the cloud, we're moving to a consumption-based, pay-as-you-go model, driving a change from Capex to Opex which is influencing cashflows. For our customers, there's increased competition from new players (e.g. public cloud providers). IP is driving a shift to software-defined products running on generic IT, while standards have not been developing quickly enough, leading to uncertainty, and there's increased competition from the IT industry on vendors. It's quite a list.

To respond and succeed, technology suppliers' businesses will have to transform:

- **From hardware to software** – virtualized, software-defined products, requiring new skills and approaches to development

- **From transaction to collaboration** – new approaches to delivering projects and sales / marketing practices
- **From bespoke to generic platforms** – and the shift to IT-based technology is putting downward pressure on prices, requiring new approaches to differentiation
- **From Capex to Opex** – transitioning business models to manage subscription or consumption-based cashflows

At our 2012 Conference, we identified that the turning point had been reached and headlined our annual conference that year 'Adapt or Die'. Some at the time thought we were being a bit extreme, but looking back five years on, we have been proved right; the whole industry has been transformed, and those that adapted have survived and thrived.

Back in 2012, we weren't just telling everyone else to adapt – we were also acutely aware that IABM needed to change too to move with this paradigm shift that was affecting our industry. IABM responded with a series of initiatives, summarised in the slide below:

## IABM initiatives since 2012



As a result of this fundamental restructuring of the Association and the success of the various initiatives that underpinned it, IABM membership rose from 312 in 2012 to 536 today – representing a very significant proportion of the overall industry. In addition, we drove international engagement: in 2009, IABM membership was 49% UK, 30% EMEA, 19% Americas and 3% APAC. Today it's 28% UK, 26% EMEA, 30% Americas and 16% APAC – we're now a truly international organisation.

So how can we help members through this change today and into the future through further developing IABM's founding principles of knowledge, support and leadership? Here's what we've done so far:

### Knowledge

- Relaunched our business intelligence in 2015 with a focus on buy-side data, technology use cases and regional developments – cohesive, comprehensive and understandable
- Introduced GMVR Essentials to make critical, sector-specific business data more accessible to vendors of all sizes
- Added technical, sales and marketing courses to educate members in the latest technologies and techniques
- Launched the IABM Glossary of Terms to give the industry a central repository of understanding for all our industry-specific technologies and standards

- Introduced the Knowledge Vault to give on-demand access to our vast array of presentations, articles, webinars and video interviews on a variety of topics as well as members' white papers

### Support

- IABM Connect – an industry-wide platform to find dealers and open your products and services to a large end-user audience
- Events and networking – international and locally focused to spread knowledge and provide valuable networking opportunities with technology users
- Topical resources – useful information on GDPR, Brexit and other 'as they happen' events and concerns
- Brand enhancement – IABM TV promotional filming, IABM Excellence Awards, advertising and sponsorship opportunities

### Leadership

- Providing a collaboration platform to bring technology vendors and end-users together – for example, curating the IP Showcase Theaters to educate the industry, sales and marketing summits, the Industry Collaborative Groups program and our flagship annual conference

In 2009 IABM membership was 49% UK, 30% EMEA, 19% Americas and 3% APAC. Today it's 28% UK, 26% EMEA, 30% Americas and 16% APAC – we're now a truly international organisation

## 2018 and beyond

Next year, on top of maintaining and enhancing all of these services to members, we will also:

- Partner with more events globally and embed our high quality conferences within shows around the world
- Continue our global/local development with regional and country councils
- Launch a new membership category for Start-Ups
- Continue with the Industry Collaborative Groups program, bringing in more organizations
- Work with partners on Cyber Security, IP Showcase and more collaborative initiatives
- Carry on continuous development of the Knowledge Vault
- Consolidate education and training into the Knowledge Vault to provide a one-stop, comprehensive industry reference resource
- Grow IABM Connect to increase visibility of members' products and engagement with end-users
- Further develop our Insight and Analysis offering
- Provide more personalised interaction with the website to give every user a fast track to their own particular areas of interest



- Create more working groups on key issues – making members more connected to end-users and the wider community. Two new working groups will be announced very soon
- Create a dialogue to facilitate alignment of roadmaps and more supplier/customer events
- Create End-User Councils both regionally and globally – giving your customers a voice

In summary, while our industry has transformed and continues to change, so is IABM, and we will always be there for you to make your business easier – however, wherever and whenever we can.

## IABM Initiatives for next year and beyond



- Continue to Inform and Support and provide Guidance to members and industry in general



NAB LAS VEGAS WILL TAKE PLACE 9-12<sup>TH</sup> APRIL 2018

# IS **NAB** ALWAYS ON YOUR MIND?

(UH HUH)

COLLECTION  
DEADLINE

OCEAN FREIGHT  
22-25<sup>TH</sup> JAN

AIR FREIGHT  
12-15<sup>TH</sup> MARCH



EXHIBITION  
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NABSHOW

[www.exhibitionfreighting.co.uk](http://www.exhibitionfreighting.co.uk)

## 2017 – Some highlights

### Industry Collaborative Groups

Both Digital Production Partnership (DPP) and Streaming Video Alliance (SVA) were endorsed as an Industry Collaborative Group (ICG) under IABM's ICG Endorsement Program. They join AIMS, MOS Development Group, SMPTE and Video Services Forum in meeting strict collaborative criteria to achieve endorsement, including; beneficial to the industry; non-discriminatory membership policy; open, standards-based approach; non-profit; and not favoring the interests of an individual company.



**IABM is offering much more than a stamp of approval to industry collaboration**

The Industry Collaborative Group (ICG) Endorsement Program is a major IABM initiative and is designed to encourage collaboration across a wide range of industry issues and opportunities, from best practice to standardization and interoperability.

IABM's vision is for a universally recognized framework where endorsed collaborative groups will be supported, promoted and encouraged to fulfill their potential and move forward in an open, constructive environment to the benefit of the wider industry. IABM will host and chair meetings, provide technological expertise, expand internationally, provide space at shows and much more.

Applications for endorsement are invited from all industry collaborative groups. More information and details of how to apply can be found at [www.theiabm.org/icg](http://www.theiabm.org/icg)

**ENDORSED GROUPS**

AIMS MOS VSF SMPTE



### IP Showcase

IABM was pleased to partner with AES, AIMS, AMWA, EBU, MNA, SMPTE, and VSF during NAB Show and IBC this year to deliver The IP Showcase, where everyone from broadcast/IT engineers and CEOs to TV producers could learn everything they need to know to unleash the full potential of using IP for real-time media.

IABM curated IP theatre content for the IP Showcase and other destinations around the world that ran a non-stop series of presentations covering the full gamut of knowledge for real-time IP production and intra-facility distribution. Topics such as full and hybrid IP infrastructures; explanations of SMPTE ST 2110; SDI to IP migration strategies; automated device discovery and registration; SMPTE ST 2110 and AES67 audio; new sync and timing with ST 2059; and a number of real-life case studies of IP facility installations were covered. Presentations from our sessions this year can be viewed at [www.theiabm.org](http://www.theiabm.org)

### Sales & Digital Marketing Training Initiative Launched

IABM is committed to supporting its members across all areas of their operations to give them the edge they need to succeed. Our sales and marketing summits were enthusiastically taken up by members last year, with many asking for more in-depth training.

We extended our offer to include online videos covering the basics of engaging with the broadcast and media industry and partnered with specialist sales and marketing training organizations to deliver tailored courses at discounted rates.

## IABM announces new Board of Directors

During July we announced the results of our biennial election of Board Directors. IABM was established over 40 years ago by its members and remains controlled by them, and the Board is both made up of members and voted for by members. The IABM Board is responsible for the overall strategy of IABM, setting, reviewing and changing as necessary the

policies of the association, which are then implemented by the IABM Team. The Members' Board also exercises overall financial control.

The membership of the new IABM Members' Board reflects the international make up of IABM's membership; the newly elected members are:

### New Directors



**Dr Jörg Pohlman**  
ARRI



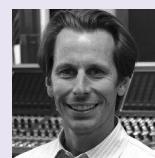
**Kevin Usher**  
Avid



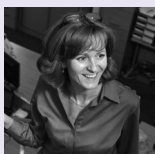
**Nicki Fisher**  
Clear-Com



**Muriel De Lathouwer**  
EVS



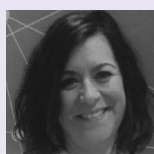
**Andreas Hilmer**  
Lawo



**Alison Pavitt**  
Pebble Beach



**Neil Maycock**  
Snell Advanced  
Media



**Esther Mesas**  
Tedial



**Anna Lockwood**  
Telstra Broadcast  
Services



**David MacGregor**  
TSL Systems

The newly voted-in members join five remaining members (elected by the outgoing board for continuity):



**James Gilbert**  
Chair – Pixel Power



**Jan Eveleens**  
Immediate past  
Chair, Axon Digital  
Design



**Marco Lopez**  
Grass Valley



**Glenn Lebrun**  
Imagine  
Communications



**Peter Sykes**  
Sony

In addition, the chairs of the APAC and Americas IABM Members' Councils respectively – also have seats on the Board

### Appointed members



**Dennis Breckenridge**  
Elevate Broadcast



**Michael Accardi**  
CueScript



**Graham Pitman**  
Vice chair



**Lucinda Meek**  
IABM Finance  
Director



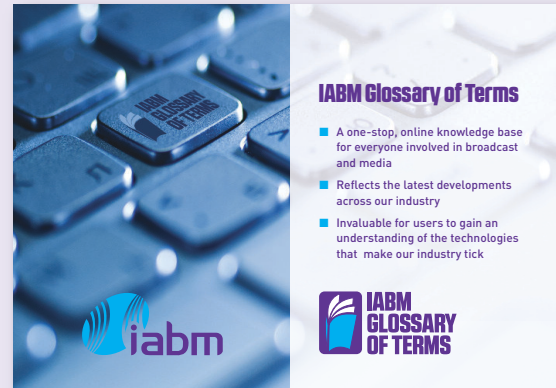
**Peter White**  
IABM Chief  
Executive



IABM is increasingly attracting members from IT-based companies that are venturing into the broadcast and media space as the make-up of our industry continues to transform

## IABM partnered with SAM to create new, industry-wide Glossary knowledge tool based on SAM's renowned Digital Fact Book

The IABM Glossary is a one-stop, online knowledge base for everyone involved in broadcast and media. The Glossary is a living resource, and will continue to build on the solid foundations of SAM's Digital Fact Book, using IABM's own technology experts to add definitions and explanations of new developments as they happen across the industry. IABM will also be encouraging contributions from every direction – standards bodies, industry organizations, vendors, system integrators, end-users and individuals – to ensure the Glossary meets and maintains its ambition to be a universal knowledge resource for everyone in the industry.



## IABM membership

We reported the fastest growth in membership on record, bringing total worldwide membership to a new high of 536.

We are certain that all of our members will profit from the ever-growing range and depth of services available from IABM. We are continuing to grow the range and depth of services for members as well as developing a regional infrastructure, to better represent region-specific concerns. We are also increasingly attracting members from IT-based companies that are venturing into the broadcast and media space as the make-up of our industry continues to transform.

*"As a technology spin-off company new to the broadcast market, IABM business intelligence has proven very valuable in many aspects of our decision-making process. Now that we are successfully launched to the market, we are looking forward to utilizing your excellent training courses in order to help our employees gain a more effective understanding of industry needs so we can create the best technology solutions possible."*

**Jackie Green, President & CTO, Alteros**

*"IABM's dedication to facilitating the exchange of knowledge that shapes and defines the broadcast industry aligns with Artel's mission. As an industry leader of multimedia delivery solutions, Artel is delighted to be a member of IABM. Having access to industry and technology intelligence, business reports, networking opportunities, and other resources at our fingertips reinforces our own research and allows us to accelerate the development of new products and solutions to meet the unique requirements of broadcasters, telcos, and other global markets."*

**Karen Menard, Marketing and Communications Manager, Artel Video Systems**

*"We joined IABM after talking to some of our partners who are members. Already we have taken advantage of the lounges at trade shows to meet with customers off the show floor, and the IABM team have been a great source of information on services offered by other members that fill gaps for us. I wish we had cottoned on to IABM sooner."*

**Simon Jackson, Director of AVC Auckland, AVC Group**

*"IABM has long been known as a key resource and leader in providing information about the advancement of technologies to the community. We are grateful for the opportunity to become a member, as CRYSTAL continues to grow and expand its reach into the international markets. The benefits of membership are very important to me, and CRYSTAL, as CRYSTAL's technology and products evolve. We look forward to becoming an active member and part of the IABM community."*

**Roger Franklin, President and CEO, CRYSTAL**

*"Joining IABM lets us interact with like-minded people and companies who can be invaluable sources of information and support to both our sales and technical staff. It is a great way to contribute to the growth of our industry and keep up with developments in the field, as well as an excellent opportunity to learn from others and to exchange experiences and knowledge."*

**Charlotte van Hertum, Marketing Manager,  
Mobile Viewpoint**

*"Our main reasons for joining IABM are getting useful market/technical intelligence and doing our promotion effectively. For our traditional and new business, we believe IABM's input helps us."*

**Takeshi Hiraoka, Manager of Global Business Promotion  
Department, Broadcast & Media Division, NEC Corporation**

*"IABM came to us at a perfect time when we were strategically planning for the 2017/2018 trade show calendar. Of course, we will look forward to receiving the discounts they provide. As important, having access to member lounges will prove to be a worthy extension to our exhibiting space. The networking opportunities will also give us another outlet to communicate our business value to customers and partners."*

**Nancy Cramer Pingitore, VP, Sales & Business  
Development, N. America, ThinkAnalytics**

*"Major industry events are incredibly important in generating new business across the globe. The benefits of IABM membership in this regard are invaluable."*

**Paul Davies, Marketing & Communications, Yospace**

## New IABM members

**ARRIS Solutions UK Ltd**  
[www.arris.com](http://www.arris.com)

**AV8 Media**  
[www.av8.com.sg](http://www.av8.com.sg)

**AVCOM of Virginia, Inc.**  
[www.avcomofva.com](http://www.avcomofva.com)

**AVIWEST**  
[www.aviwest.com](http://www.aviwest.com)

**Axel Technology s.r.l**  
[www.axeltechnology.com](http://www.axeltechnology.com)

**BCi Digital**  
[www.bcidigital.com](http://www.bcidigital.com)

**Bitmovin, Inc.**  
[www.bitmovin.com](http://www.bitmovin.com)

**Domo Tactical  
Communications (DTC) Ltd**  
[www.domotactical.com](http://www.domotactical.com)

**Encompass Digital Media**  
[www.encompass.tv](http://www.encompass.tv)

**ES Broadcast**  
[www.esbroadcast.com](http://www.esbroadcast.com)

**Exhibitions India Group**  
[www.exhibitions  
indiagroup.com](http://www.exhibitions<br/>indiagroup.com)

**GloCom**  
[www.glocomltd.com](http://www.glocomltd.com)

**Intraware**  
[www.intraware.com.au](http://www.intraware.com.au)

**KXWELL**  
[www.kxwell.com](http://www.kxwell.com)

**Marshall Electronics Inc**  
[www.marshall-usa.com](http://www.marshall-usa.com)

**Massive**  
[www.massive.co](http://www.massive.co)

**Media Broadcast Satellite  
GmbH**  
[www.mb-satellite.com](http://www.mb-satellite.com)

**Merging Technologies**  
[www.merging.com](http://www.merging.com)

**MiraVid**  
[www.miravid.com](http://www.miravid.com)

**NEP Inc.**  
[www.nepinc.co.jp](http://www.nepinc.co.jp)

**Nippon Video System Co.,  
Ltd**  
[www.protechweb.jp](http://www.protechweb.jp)

**OOONA**  
[www.ooona.net](http://www.ooona.net)

**PBT EU**  
[www.pbteu.com](http://www.pbteu.com)

**Sales Sound**  
[www.salsasound.com](http://www.salsasound.com)

**Scality Inc.**  
[www.scality.com](http://www.scality.com)

**sonoVTS GmbH**  
[www.sonovts.de](http://www.sonovts.de)

**Studio Network Solutions**  
[www.studionetwork  
solutions.com](http://www.studionetwork<br/>solutions.com)

**SYMPPLY**  
[www.gosymply.com](http://www.gosymply.com)

**Technology K.A.R. Inc.**  
[www.technologykar.com](http://www.technologykar.com)

**Teletor, LLC**  
[www.teletor.com](http://www.teletor.com)

**Timeline Television Ltd**  
[www.timeline.tv](http://www.timeline.tv)

**Video Progetti SRL**  
[www.videoprogetti.it](http://www.videoprogetti.it)

**Videomenthe**  
[www.videomenthe.fr](http://www.videomenthe.fr)

**WorldCast Systems**  
[www.worldcastsystems.com](http://www.worldcastsystems.com)

**ZOO Digital Group**  
[www.zoodigital.com](http://www.zoodigital.com)

# APAC region update



**Peter Bruce**  
*Director, APAC  
IABM*

## An exciting year of unexpected change for all!

Reflecting on the last year, it has been one of amazing change and contrast for broadcast and media end-users across the APAC region. South Korea became the first country in the world to transmit UHD over the air using ATSC 3.0 – ahead of even the USA. The march towards UHD in Japan, South Korea and, to a certain extent, China is real and now.

South Korea has been driven by its commitment to transmit the 2018 Winter Games in PyeongChang in UHD – it's now just a couple of months until they begin on 9th February. While the major TV stations and studios have been quick to push ahead with UHD infrastructures, they have opted to base these on SDI as IP was not sufficiently advanced (and standardized) when they needed to start work. The debate initially was between Quad Link and 12Gig SDI, so it was a huge relief to all when cable manufacturers developed 12Gig SDI cable capable of carrying a UHD signal over 100 meters. As a result, we saw a Korean company launch a 12Gig SDI transmission switcher and various routing options to handle UHD signals over SDI.

South Korea is also pushing ahead with its roll-out of ATSC 3.0, on schedule to have 27 transmitter systems running by the end of 2017, and to deliver 90% coverage of the whole country by 2020. This is a very impressive project and again, will be ahead of the US program.

Until this year, Japanese broadcasters were slow to embrace IP workflows. It seems that, while the Japanese technology vendors were focusing on IP workflows for international sales, their home broadcast customers appeared happy to stay with a traditional SDI workflow. Out of nowhere there was a

sudden shift in focus, and almost instantly UHD over IP became the preferred route for the Japanese end-users. Thus 2017 has proved to be a major turning point for Japanese broadcasters.

Japan's focus for UHD is the 2020 Tokyo Summer Games. While 8K coverage has also been announced for the event, the major TV stations remain very much focused on UHD, although NHK will cover several top-level events in 8K. The general direction of travel in Japan remains very much UHD rather than 8K, however.

At the CCBN show in China, cloud was everywhere – there seemed to be no stand without a cloud logo. This is perhaps not surprising given that there is a government initiative to push cloud workflows in all technology sectors, but many TV stations remain skeptical; TV stations in China are for the most part governmental, and so, conservative by nature. Nonetheless, the major Chinese technology vendors are offering a wide range of cloud solutions to these TV stations. UHD acquisition and production is also a major focus in China – there have already been several OB trucks and studios delivered in UHD. It is, however, unclear at present how much UHD content will be delivered to viewers via transmitters over the next few years.

For the rest of the APAC region, while a move to UHD is not a major objective for many TV stations, there is clear evidence of a move to IP workflows – which will of course enable UHD production when this becomes a necessity.

All in all, 2017 has been a year of momentous change across the APAC region as the inevitable move to IP and UHD continues. Don't expect the rate of change to slow in 2018!



# Participate at South Asia's largest Broadcast Industry Expo

Convergence India is the only platform in South Asia which demonstrates convergence of technologies in Telecom, IT, Broadcast & Digital media sectors.

The expo will showcase latest trends and technologies related to Telecom, Broadcast, Cable and Satellite TV, Cloud & Big Data, IoT, Digital Homes, Mobile devices, Film and Radio, Content Creation, Management and Delivery, etc. and also provides engagement with digital innovators, international business gurus, telecom and broadcasting czars, leaders from IT & Internet and IoT industries. It is a mecca of mega-minds accumulating under one roof to take Prime Minister Narendra Modi's vision of digital India ahead, thus resulting in empowering the citizens of the country by transforming the landscape of Indian economy.

The three-day exhibition and concurrent conference sessions provides an excellent networking opportunity for speakers, visitors and delegates. This platform attracts high quality exhibitors to showcase their expertise and identify the thriving business opportunities in India.

The event will be held in Halls 7, 8, 9, 10, 11, 12 and 12A of Pragati Maidan venue.

## Post Show Highlights:

Number of exhibitors:	635
Total attendees:	19,234
Countries represented:	31
Conference sessions:	25
Conference delegates:	1,164



## Special rates for IABM Members

IABM has partnered with Convergence India and have negotiated the following member discounts for exhibition space:

Space occupied by each Exhibitor	Discount
Up to 36 sqm	5.0%
37 – 72 sqm	10.0%
73 – 144 sqm	12.5%
Above 144 sqm	15.0%

To find out more please contact  
[info@theiabm.org](mailto:info@theiabm.org)

# Europe & UK region update



**Darren Whitehead**  
*Director of Business  
Development, IABM*

The UK Members' Council elections in the Summer were closely fought and I am pleased to say the UK now has a newly elected and enthusiastic Council in place for a two-year term. The Council members are –

**Micky Edwards** – Amagi Media Labs

**Mark Wilson-Dunn** – BT Media & Broadcast

**David Letson** – Calrec Audio

**Stuart Jalland** – Cisco Systems

**John Sparrow** – Clear-Com

**Steve Plunkett** – Ericsson

**Martin Paskin** – Gearhouse Broadcast

**Chris Nairn** – Grass Valley

**Stuart Russell** – Ross Video

**Peter Blatchford** – Starfish Technologies

**David Atkins** – Suitcase TV

**Chris Exelby**, CHAIR – TSL Professional Products

In 2017, the UK Members' Council delivered a number of events that brought members and end-users together and in 2018 we will continue to focus on and drive activity around meeting end-user customers to drive engagement and foster a deeper understanding of their rapidly changing business needs.

Looking forward, UK Members' Council will be present at BVE Expo at Excel, London, at the end of February. Look out for the special content and tour programmes that will be on offer – [www.bvexpo.com](http://www.bvexpo.com)

The EMEA Members' Council is about to deliver its first newsletter (in local language) to the five areas of Europe managed directly by the Council that represent the largest concentrations of IABM members. Due to the geographic and language differences the newsletter is the best way for the Council to reach out to members across Europe and engage with them across all the subjects and issues covered by IABM.



The desire and commitment from the members to have direct input and influence into the activities and member benefits delivered by IABM through regional Members' Council involvement is testament to the depth of feeling across the industry to make a difference for the greater good.

It is pleasing that more and more members are coming into the IABM fold (we now have over 536 members globally) and there are exciting plans for new developments that will make IABM membership even more valuable and essential.....so keep checking out the website – [www.theiabm.org](http://www.theiabm.org)

In my view, never has there been a better time to be an IABM member; the range of IABM services continues to grow, and never have IABM members been more supported and had more opportunity to shape and influence what IABM does for them.

# New EMEA members' council

The new EMEA Members' Council has been elected, with a brief to provide a regional voice and forum to address European members' particular needs. The EMEA Members' Council members are drawn from companies based in nine European countries to provide a truly representative regional industry body. The new EMEA Members' Council follows the establishment of highly successful members' councils in the Americas and APAC, as well as a local UK council over the last two years.

The new EMEA Members' Council held its inaugural meeting at NAB in April this year, where Ole Clausen was elected Chairman. As Founder and CEO of Danmon Group and Dan Technologies, Clausen has more than 40 years' experience in the European market. He was also awarded lifetime Honorary Membership of IABM in December 2016 in recognition of his inspiring service to the industry and support for IABM throughout his career.

Ole Clausen said: "I'm very honored to have the opportunity as chairman of the EMEA Members' Council to further consolidate the position of IABM as an important stakeholder in the industry. With the vast changes sweeping across our industry, moving closer to our members is an important step, bringing them our help and assistance in navigating these changes. We also aim to create more subsidiary local councils – on the same model as the UK council – in Germany, Scandinavia and France to further strengthen our presence across Europe."

## Serving on the IABM EMEA Members' Council with Ole Clausen are:

**Laurent Lafarge** – *President & CEO, Anevia*

**Madeleine Bråthen Bjaaland** – *Legal Manager, Appeal TV*

**Goran Papić** – *Senior Market Intelligence Analyst, ARRI*

**Dorothee Anfang** – *Marketing Consultant, Arvato Systems*

**Jean-Louis Lods** – *Director, Business Development, DMC*

**Jochen Bauer** – *Marketing Director, Guntermann & Drunck*

**Anthony Smith-Chaigneau** – *Senior Director Product Marketing, Nagra*

**Thomas Gunkel** – *Market Director Broadcast, Skyline Communications*

**Roberto Pascual** – *Sales Director, VSN*

**Chris Exelby** – *Managing Director, TSL Professional Products (Chairman of UK Regional Council)*

Darren Whitehead, IABM Director of Business Development who has overseen the formation of the EMEA Members' Council, said, "The new Council has a member and geographical spread to ensure the widest representation possible of all European member views, whatever their location or company size. It has also been a real coup to secure such an esteemed and widely respected chairman in Ole Clausen. I am looking forward to working with Council to more fully represent European views, ideas and initiatives and invite any European members to get in contact with me if they wish to table something to Council for consideration."

"Our Members' Councils in APAC, the Americas and the UK have been tremendously successful in bringing local knowledge and relevance to members in those regions, and it was a natural next step to create a Members' Council for European members, backed up by the full range of IABM central resources," said Peter White, IABM CEO. "The wealth of industry experience and regional expertise that makes up the new EMEA Members' Council will bring even greater relevance and engagement for all our members in the region."



# MEA region update



**Hassan Ghoul**  
*Director of MEA,  
IABM*

**MEA market overview** – The latest edition of the 'Arab Media Outlook 2016-2018', which is produced jointly by the Dubai Press Club and the Dubai Media City, states that "The region's media sector stands at an interesting evolution point. On one end, the unique demographics and the fast pace of digitisation have created a drive for growth. On the other end, on the macro-economic level, depressed oil prices and political conflicts have created a turbulent environment for media, which is typically vulnerable to economic downturns."

The region's business continues to face several challenges. The geopolitical tensions continue to impact certain nations in this region and governments are implementing policies to improve the macro economic outlook and restore confidence in the business environment.

## IBC 2017

Attendance from the MEA region at IBC 2017 was better than expected with several IABM members reporting high level attendance by major regional MEA broadcast and media organizations. Several meetings with IABM members were held during the show as well as meetings with prospects.

We held a panel discussion for IABM TV during the show. The subject of the discussion was the adoption of new IP technologies by the regional broadcasters. The panel discussion was attended by:

- Mounzer Bechara, Regional Manager, Avid
- Ali Rasheed, Business Development Manager, Tek Signals
- Hasan Sayed, Managing Director, Master Media

The general consensus was that IP adoption is still at a very early stage in the region. While new tenders for greenfield sites are now more and more centered on IP infrastructures for future-proofing reasons (not least, UHD and 8K), many broadcasters with existing SDI set-ups will mostly concentrate on hybrid IP/SDI solutions for the foreseeable future. Some parts of the MEA region are also hampered by a lack of high speed broadband, and its relatively high cost where it is available, so satellite and terrestrial will remain the dominant delivery mechanism over the next few years; the drive to IP to enable multi-platform delivery is not presently as strong in MEA as in other parts of the world.

## PSS 2017

The PSS 2017 event was held in Dubai on 2nd October. This is an annual event organized by IABM members Axon, Dolby and TSL Professional Products. The event was attended by about 90 Broadcast & Media executives from the Middle East region, including broadcasters, systems integrators and partner companies.

Each of the three organizing companies made a technical presentation. IABM delivered an IBC update presentation which covered the State of the Broadcast & Media Industry as well as the highlights from IBC in September.



### Arabsat 9th Broadcasting Customer Forum

Arabsat is the leading Satellite operator in the MENA region. The Arabsat Broadcasting Customer Forum was initiated 10 years ago for the media industry with the idea of bringing together Arabsat's customers and partners to establish one large community.



During the event, IABM was invited to take part in a panel discussion about broadcasting technologies. The other panelists were from Arabsat, Newtec and Overon. The panel discussion was moderated by Hasan Sayed from Master Media. It highlighted the latest technology developments that are impacting the broadcast and media industry globally and in the MENA region. The migration to IP technology and cloud networks is still at an early stage in the region which is witnessing a steady increase in HDTV services.

The panel indicated that efficiency improvement and cost reduction were important drivers in the choice of technologies by regional broadcasters. Artificial Intelligence will play an important role in the adoption of new improved workflows.

Arabsat highlighted the use of spot beams which provide a better way to target viewers in certain areas. They also pointed out the new generation of satellites which provide their customers with greater bandwidth.

### ASBU

ASBU has invited the IABM to accept a position on the ASBU Training Academy Advisory Board and to attend the first meeting of the Advisory Board which took place in Tunis on 29 and 30 October 2017. The ASBU Training Academy Advisory Board comprises nine independent members. Its main role is to help the Academy's team in developing the strategy for the Training Academy and to identify the priorities for the training in relation to the major developments in the broadcasting and media markets.

### Training:

The IABM IP Network Essentials training course ran on 27 – 28 November 2017 in Dubai.



## PROMOTE YOUR COMPANY

**IABM provides a wide range of opportunities to promote your company across the broadcast and media industry**

- Send us your press releases for our news pages
- Enquire about speaking at one of our thought leadership events, webinars or seminars
- Attend our networking events
- Apply for an IABM Award
- Advertise in our publications
- Provide content for our publications
- Sponsor or exhibit at an event



Knowledge, Support & Leadership  
Visit: [www.theiabm.org](http://www.theiabm.org)

# A view from the Americas members' council



**Caryn Cohen**  
*Director, North America, IABM*

September at IBC was a very successful show for IABM and our members. We had record-breaking attendance in our member lounges as well as at the IABM State of the Industry breakfast. IABM North America added nine new member companies in the region and members report a successful IBC overall. At IBC, IABM launched a new Business Intelligence offering called GMVR Essentials.

As the leading provider of data, research and business intelligence reports in the broadcast and media technology sector, IABM partnered with Devoncroft to form IABM DC to produce the Global Market Valuation & Strategy Report (GMVR). The GMVR has been and remains the definitive valuation of the broadcast and media technology supply market, with detailed regional splits, product and segment analysis and forecast trends for the ensuing five years. Produced annually, in addition to partner submissions, it uses data provided from the Devoncroft BBS Market Report (including unpublished data) amongst numerous other sources to produce the best modeling and forecasting in the industry.

While the GMVR is the most comprehensive data available in the industry, it can be too extensive for some small and mid-size companies' needs. With this in mind, GMVR Essentials were created with precise and relevant data that is 'essential' for your business planning.

- Accurate information for targeting your product development, sales and marketing efforts
- Understanding your company's position within a segment, assessing the competition and what's driving their success
- Technology trends; authoritative evidence to back up your strategy. This is also vital when selling a company, acquiring one, looking for finance etc.
- Rigorously researched, well-informed strategic overview, that benefits from participation of leading technology suppliers, and has been reviewed by C-level executives at leading technology buyers – giving you a solid check on what your product managers say in segments, or salespeople in geographies
- Knowing where your company stands – its position in the market; good for management, good for staff, good for backers

GMVR Essentials are product/service category-specific reports and data tables generated from the GMVR.

However, each Essentials report includes a comprehensive strategic overview covering the entire broadcast and media technology sector, helping you understand the trends that are driving our industry forward and position your business within it. In addition, each report includes the executive summaries from each of the nine segments in the larger GMVR giving you an overview of the entire industry. Lastly, GMVR Essentials include an emerging technology chapter full of thought provoking information. I'd encourage you to learn more at [www.iabmdc.com/gmvr-essentials](http://www.iabmdc.com/gmvr-essentials).

Shortly after IBC, we jumped into NAB Show New York – scheduled a month earlier than previous years. Also new this year is AES being co-located with NAB NY at the Javits Center in New York. IABM had about 120 members at NAB NY and another 30 members at AES. We held a State of the Industry breakfast on day one. IABM CTO, Stan Moote, presented the facts and figures from IABM research and then we moved into two panel discussions. The first panel, The Business of Selling, discussed whether selling boxes, online or dealer Sales, hardware or software, or maintenance contracts, the media business is becoming more about improving the customer's supply chain. Panelists included: Del Parks of Sinclair Broadcasting, Rich Hajdu, Channel expert at Digital Broadcast, and filling in for Michel Suissa of B&H who couldn't attend last minute was Tom Burns of Dell EMC. The second panel morphed into two very interesting presentations by the Streaming Video Alliance's executive director Jason Thibeault, and Limelight's Sr. product marketing manager, Charlie Kraus, discussing what is broadcasting today in the wake of streaming media and is there profitability beyond a few large contenders. **All of the presentations are available on the IABM website.**



GMVR Essentials Report – produced annually, in addition to partner submissions, it uses data provided from the Devoncroft BBS Market Report

The week following NAB New York, we attended the annual SMPTE Technical Conference in Hollywood, California. Despite the 104-degree heatwave that week, the conference was well attended. Stan Moote, IABM CTO, championed the IP Showcase again this year along

with the IABM presentation Theater. In addition to Stan, we had John Ive, IABM's Director Strategic Insight and Paul Treleaven, IABM Technology Standards Specialist participating as well. **You can view Stan's video blog on the SMPTE Technical Conference on the IABM website.**



## THE NEW WAY OF RECEIVING KEY INFORMATION ABOUT YOUR SECTOR

**GMVR Essentials** are product/service category-specific reports generated from the most comprehensive database of its type in our industry, the GMVR. **GMVR Essentials** provide you with precise and relevant data that's essential for your business planning. **GMVR Essentials** reports and data tables also include a comprehensive 120 page strategic overview covering the entire broadcast and media technology sector, helping you understand the trends that are driving our industry forward and position your business within it. With **GMVR Essentials**, you get the best of both worlds – laser focused data and your business put into context.

The parent GMVR, from which **GMVR Essentials** are abstracted, encompasses data on more than 2,000 industry product and service suppliers, and provides comprehensive analysis, market sizing and forecasting for more than 150 product categories. A **GMVR Essentials** report may contain references to other sections of the larger GMVR report. To pursue these, you will also need to purchase the referenced **GMVR Essentials** report, or the whole GMVR report.



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# Pixel Power helps Phoenix to rise at ITV



**Nick Haworth**  
*Head of Technology  
Studios ITV*

For every broadcaster and media company, promos are an essential tool in attracting and retaining audiences. We spoke to Nick Haworth, Head of Technology, Studios at ITV – the UK's largest commercial broadcaster – about an ambitious project he has recently helmed to automate the production workflow for the 1000+ programme promotions the organization produces every month. IABM member Pixel Power's Factory graphics engine is at the heart of ITV Phoenix – the name given to the end-to-end, automated campaign production workflow now successfully implemented by ITV.

## Why does ITV have to produce so many campaigns every month?

"ITV has seven linear broadcast channels in the UK– six free-to-air and a pay channel on the Sky platform. In addition, ITV delivers its content across multiple platforms. This is either through our over-the-top service the ITV Hub, available on 30 platforms including ITV's website (itv.com), pay providers such as Virgin and Sky, or through direct content deals with services such as Amazon, Apple iTunes and Netflix. Our marketing campaigns have to cover all these outlets.

"On average, we promote around 35 different programmes a month. Our creative team produces a 'master' for each one, then a number of second-level versions of it – 10, 20, 30 and 40 second variants for example. Each variant then needs to be further versioned for different slots – 'tomorrow', 'tonight', 'coming up', 'next' etc. As a result, the number of assets we actually have to deliver is around 1000 per month, each with six or seven different variables."

## Do promos also vary by region or are they the same across all areas?

"We produce practically all the promos carried by ITV and UTV channels here in our South Bank facility in London. We also produce 'blank' versions of some of the creative for STV (Scotland) and ITV Choice (Hong Kong). We also transmit some regional programming for Wales, Northern Ireland and the Channel Islands and where these occasionally opt out, they produce their own local promos."

## What drove the need for a new production workflow?

"Producing these multiple versions was a tremendous drag on the time of the creative teams – as well as being wasteful of their talent by spending so much time doing mundane versioning rather than original creative work. The process was also wasteful because our marketing department wasn't able to check them before all the work had been done. So, if there was a change required, the creative teams had to go through the whole versioning process again."

## What were the requirements the new workflow had to meet and how did you set about creating it?

"It was clear that we needed to overhaul the whole promo production process to take away the pain, so we set about finding a technology that could automate it for us. However, there was no single solution on the market that could do everything we wanted. We needed a workflow that supported both broadcast and all our other outlets based around a single source of truth, where our marketing department can input their requirement up front, then check the creative has all the right information before the production process begins. And of course it needed to take the laborious versioning process away from the creative teams to free them up for more creative work. We named the project ITV Phoenix.

"Pixel Power's Factory had all the automation and versioning tools we needed, so we chose that as the backbone of ITV Phoenix, and then brought in other partners to work together to develop the complete

system that we had been unable to buy off the shelf. To maximize the effectiveness of Factory across the team, the project partners developed an interface to Factory that could be shared between marketing, media planning and creative staff – allowing all to work from the single source of truth – in our case, that is the end-board for each promo. Effectively this is the last few frames of each promotion which contain the programme name, when it's coming up, what channel (for cross-promotion), timing, sponsor's name etc."

### How does the new process work?

"Media planning creates the placeholder for a promo and selects the end-board from a set of templates which contains all the unique information for that promo. Never before have the media planning team been able to review and sign off the end boards before the creatives begin their work. This is a huge improvement in workflow and one that I think many broadcasters would be keen to implement. Every promo is also previewed when creative work and versioning is completed. This can be done remotely on an iPhone if necessary – for example, if there is a late change that occurs after staff have gone home, they can still review it wherever they are and send it on to transmission.

"It's the versioning that's key to accuracy – making each promo correctly and also ensuring that it goes in the schedule in the right place. Our media planners put the data into Factory via Phoenix at the start of the creation of a new promo, and own it all the way through production. This accountability – based around the end-board that is created at the start of production – removes the possibility of someone down the line making an error.

"Alongside the linear broadcast channel campaigns, there are versions for our VoD channel (ITV Hub) and all the different social media channels all require different formats. The system allows us to set up automatic transcoding for every outlet in the right format."

### How did roll-out of ITV Phoenix go?

"Smoothly! We went live with the first stage of ITV Phoenix in September 2016 – this covered the planning and delivery of the campaigns. We then went live with the automated versioning, QC and the visual preview of end-boards early in 2017, followed by automated archiving.

"Archiving is important – campaigns are often not 'here today and gone tomorrow'. A programme first shown on the ITV main channel may be retransmitted on, say, ITV3 a year later or sold to another broadcaster overseas, for example. The system allows us to quickly find the promo and make any changes required to promote the new airing."

### What improvements have you seen since Factory and Phoenix went live?

"The biggest improvement is in the lives of the people in our promo production operation. Media planners' lives have become easier – they can visualize the work they do and can make bulk changes quickly and easily too; ITV Phoenix and Factory allow them to focus on strategic media planning. For marketing, it allows them to preview the campaigns on their iPhones and send them to transmission from wherever they are. And for the creative teams, they get to spend more time being creative; there are always more channels to reach in the ever-expanding media universe so they will be just as busy – but much more creatively productive."

### This has been a complex project. How has it been working with Pixel Power?

"We worked closely with Pixel Power throughout the planning and commissioning of Phoenix, which is essentially a bespoke UI for Factory, and they gave us a lot of help and support to make it all happen. We have weekly project meetings on Google Hangout with all the companies involved, and we have together successfully very nearly completed a complex project – the final phase will be finished in November – on schedule. Pixel Power has met our expectations and those of the business – in fact, the project has delivered beyond our original requirements – the mobile approval was not in the original scope, for example. Most of all, we've delighted our users."

### Arts, business and technology – the right tools for the job

If you were to write a person specification for someone to understand and work with creative people while taking advantage of cutting edge technology to meet a pressing business need, then Nick Haworth would fit the bill perfectly. Nick started his television career at ITN becoming a TV news programme editor, and while there, studied for an MBA in his spare time. He then moved into consultancy for ITN and spent a year in Greece helping a broadcaster set up its TV news operation – training the staff in news production and putting the operational systems in place. Nick then dived into the early days of online TV with ITV in 2006, and in 2011 moved into a technical role at ITV as a bridge between programme makers and technology – "joining the dots to support them with technology relevant to their requirements" as he puts it. Asked what's next on his list after Phoenix, Nick is understandably coy – but expect to read about another innovative application of technology in the service of creativity soon!

# How to spot and stop fraud

Fraudsters are turning to more and more sophisticated methods of scamming individuals and businesses out of money, with the latter increasingly a target. A common tactic they may use is sending spoof emails impersonating a senior member of staff to try and deceive employees into transferring money. The email usually requests that an urgent payment is made outside of normal procedures, often giving a pressing reason such as the need to secure an important contract.

Criminals can also pose as regular suppliers to the company or organization and make a formal request for bank account details to be changed. This is known as invoice fraud and fraudsters may trick a company into changing their bank account payee details for a sizeable payment.

Criminals who specialize in invoice fraud are often aware of the full details of the relationship between companies and suppliers – they know when regular payments are due and, equipped with this information, they make contact with finance teams within companies and pose convincingly as suppliers.

Similarly, through mandate fraud, criminals convince firms to change a direct debit, standing order or bank transfer mandate by pretending to be an organization the business makes regular payments to – for example, a subscription or membership organization or supplier.

While the examples in this article are drawn from the UK, fraud is of course a worldwide problem with only nuances in methods differing between countries and regions.

A recent FFA UK study has shown:

- Almost 7 in 10 business leaders admitted they hadn't taken any action to protect their business and employees from an incidence of fraud
- A quarter of businesses have admitted they have fallen victim to scams or had scams attempted
- Almost half of all business leaders surveyed do not believe an act of fraud will be committed against them
- The most common targets for fraudsters are senior management and business owners in SMEs (67%)

## CEO spoofing

If you receive an email from your CEO or another senior member of staff asking you to make an urgent payment outside of normal procedures, don't automatically follow their lead. It's become very easy for fraudsters to manipulate the characteristics of an email, including the sender address, so that it looks genuine, but when you transfer the money, it goes straight to an account controlled by a criminal. Keep an eye out for any emails that might be written in a different style from usual, and always check any unusual payment requests directly, ideally in person or by telephone, to confirm the instruction is genuine.

A recent report from the City of London Police's National Fraud Intelligence Bureau (NFIB) shows that over £32 million has been reported to be lost as a result of CEO fraud.

CEO fraud will typically start with an email being sent from a fraudster to a member of staff in a company's finance department. The member of staff will be told by the fraudster, who is purporting to be a company director or CEO, that they need to quickly transfer money to a certain bank account for a specific reason. The member of staff will do as their boss has instructed, only to find that they have sent money to a fraudster's bank account.

The fraudster will normally quickly redistribute this money into other mule accounts and then close down the bank account to make it untraceable. Out of the £32 million reported to be lost by UK businesses to CEO fraud, only £1 million has been able to be recovered by the victims. This is due to businesses taking too long to discover that they have been the victim of fraud and the lost money already being moved by fraudsters into mule accounts. Most





# Out of the £32 million reported to be lost by UK businesses to CEO fraud, only £1 million has been able to be recovered by the victims.

businesses reported initially being contacted via emails with gmail.com and yahoo.com suffixes.

The largest reported amount of money given by a member of staff to a fraudster was £18.5 million which is an unusually large amount; typically, the average amount given to a fraudster is £35,000 but this can vary.

The company which lost £18.5 million is a producer of healthcare products and has offices globally. In July last year a fraudster, who purported to be a senior member of staff, phoned a financial controller who was based in one of the company's Scottish offices and asked her to transfer money to accounts in Hong Kong, China and Tunisia. The financial controller believed the man genuinely to be a senior member of staff and exchanged several calls with him as well as emails. The man convinced her to transfer money into three foreign bank accounts which resulted in the company losing £18.5 million.

The fact that one company lost over £18 million whilst most others lose on average £35,000 suggests that there may be two tiers of CEO fraud currently being committed, with some fraudsters aiming to obtain millions of pounds in a single scam while others are less ambitious, targeting a number of businesses attempting to receive lesser amounts from each.

## Educate your staff

Limited companies tend to be the most targeted type of company with 52% of reports coming from this business type. 22% of reports have come from businesses within London suggesting that this problem is particularly affecting the capital.

Deputy Head of Action Fraud, Steve Proffitt, said: "It is important that all businesses are made aware of this type of fraud. We encourage businesses to educate their staff about this type of fraud in order to prevent themselves from becoming the next victim. Employees should be encouraged to double check everything they do and never be rushed into transferring large amounts of money even if they do think that it's an important task given to them by their CEO. An increased awareness of this type of fraud amongst businesses will no doubt make it far harder for fraudsters to succeed."

How businesses can protect themselves from CEO spoofing:

- Ensure all staff, not just finance teams, know about this kind of fraud
- Have a system in place which allows staff to properly verify contact from their CEO or senior members of staff; for example, having two points of contact so that the staff can check that the instruction which they have received from their CEO is legitimate
- Always review financial transactions to check for inconsistencies/errors, such as a misspelt company name
- Consider what information is publicly available about the business and whether it needs to be public
- Ensure computer systems are secure and that antivirus software is up to date

If a supplier contacts you to make a formal request for bank account details to be changed, always verify with that supplier using their on-file details

### Invoice fraud

Invoice fraud happens when a company or organization is tricked into changing bank account payee details – usually for a sizeable payment. Criminals pose as regular suppliers to the company or organization and will make a formal request for bank account details to be changed.

Criminals who specialize in invoice fraud are often aware of the full details of relationships between companies or organizations and suppliers and they know when regular payments are due; it's not hard for them to get this information. Equipped with this, they make contact with finance teams within companies and organizations, posing convincingly as suppliers.

Payments are then repeatedly made to them and the fraud is often only discovered at the point when the legitimate supplier of the product or service chases for non-payment of their invoice. At this point, recovery of the funds from the fraudulent account is very difficult.

Every company and organization is vulnerable to invoice fraud; the vigilance of every member of staff within a company or organization is the key to prevention. If a supplier contacts you to make a formal request for bank account details to be changed, always verify with that supplier using their on-file details. It's important that everyone inside a business is warned of the dangers of invoice fraud, and that everyone knows to always check invoices to identify potentially fraudulent transactions as soon as possible.



### Following these simple steps will help protect against invoice fraud:

- Ensure that all staff who process supplier invoices and who have the authority to change bank details are vigilant. They should always check for irregularities including changes to supplier names and addresses and changes to invoiced amounts
- Changes to supplier financial arrangements should always be verified with that supplier using their established on-file details
- When a supplier invoice has been paid, it is good practice to inform that supplier of the payment details made, including the account to which the payment was made
- Check bank statements carefully. All suspicious debits should be reported to your bank immediately
- If you are at all suspicious about a request, ask if you can call back. Do so using their on-file contact details to establish if they are the genuine supplier of the goods or services
- Perpetrators of fraud often conduct extensive online research to identify suppliers to targeted companies and organizations. Consider if it would benefit your company or organization to remove this information from your website and other publicly available materials

# Cyber security – a small business guide

The impact of a cyber breach or attack can be huge: there's the time you could lose through having to fix your website or systems, the potential loss of customers, damage to your reputation and all the other potential consequences of a hacker getting their hands on your data.

The good news is protecting your business from hackers and viruses does not have to take a lot of time, work or money. Small businesses can do two simple things which can help improve their online security – install the latest software and app updates and use a strong, separate password for your email.

Once you and your staff are taking these two key actions, there's a range of guidance you can follow to protect your business.

Cyber Security: a guide for small businesses – download at [www.ncsc.gov.uk](http://www.ncsc.gov.uk). Most cyber-attacks exploit basic vulnerabilities in IT systems and software.

You can prevent these by using Cyber Essentials, which sets out five controls to significantly reduce your company's vulnerability to cyber-attacks. The scheme is suitable for organisations of all sizes, in all sectors. Visit [www.cyberessentials.ncsc.gov.uk](http://www.cyberessentials.ncsc.gov.uk)



## Cyber Security Small Business Guide

This advice has been produced to help small businesses protect themselves from the most common cyber attacks. The 5 topics covered are easy to understand and cost little to implement. Read our quick tips below, or find out more at [www.ncsc.gov.uk/smallbusiness](http://www.ncsc.gov.uk/smallbusiness).

### Backing up your data

Take **regular** backups of your important data, and **test** they can be restored. This will reduce the inconvenience of any data loss from theft, fire, other physical damage, or ransomware.



**Identify what needs to be backed up.** Normally this will comprise documents, photos, emails, contacts, and calendars, kept in a few common folders. Make backing up part of your everyday business.

**Ensure the device containing your backup is not permanently connected** to the device holding the original copy, neither physically nor over a local network.

**Consider backing up to the cloud.** This means your data is stored in a separate location (away from your offices/devices), and you'll also be able to access it quickly, from anywhere.

### Keeping your smartphones (and tablets) safe

Smartphones and tablets (which are used outside the safety of the office and home) need even more protection than 'desktop' equipment.

**Switch on PIN/password protection/fingerprint recognition** for mobile devices.

**Configure devices so that when lost or stolen they can be tracked, remotely wiped or remotely locked.**

**Keep your devices (and all installed apps) up to date**, using the 'automatically update' option if available.

**When sending sensitive data**, don't connect to public Wi-Fi hotspots - use 3G or 4G connections (including tethering and wireless dongles) or use VPNs.

**Replace devices that are no longer supported by manufacturers** with up-to-date alternatives.

### Preventing malware damage

You can protect your organisation from the damage caused by 'malware' (malicious software, including viruses) by adopting some simple and low-cost techniques.



**Use antivirus software on all computers and laptops.** Only install approved software on tablets and smartphones, and prevent users from downloading third party apps from unknown sources.

**Patch all software and firmware** by promptly applying the latest software updates provided by manufacturers and vendors. Use the 'automatically update' option where available.

**Control access to removable media** such as SD cards and USB sticks. Consider disabling ports, or limiting access to sanctioned devices. Encourage staff to transfer files via email or cloud storage instead.

**Switch on your firewall** (included with most operating systems) to create a buffer zone between your network and the Internet.

### Avoiding phishing attacks

In phishing attacks, scammers send fake emails asking for sensitive information (such as bank details), or containing links to bad websites.



**Ensure staff don't browse the web or check emails** from an account with Administrator privileges. This will reduce the impact of successful phishing attacks.

**Scan for malware and change passwords** as soon as possible if you suspect a successful attack has occurred. Don't punish staff if they get caught out (it discourages people from reporting in the future).

**Check for obvious signs of phishing**, like poor spelling and grammar, or low quality versions of recognisable logos. Does the sender's email address look legitimate, or is it trying to mimic someone you know?

### Using passwords to protect your data

Passwords - when implemented correctly - are a free, easy and effective way to prevent unauthorised people from accessing your devices and data.



**Make sure all laptops, MACs and PCs use encryption products** that require a password to boot. Switch on password/PIN protection or fingerprint recognition for mobile devices.

**Use two factor authentication (2FA)** for important websites like banking and email, if you're given the option.

**Avoid using predictable passwords** (such as family and pet names). Avoid the most common passwords that criminals can guess (like *password*).

**If you forget your password** (or you think somebody else knows it), tell your IT department as soon as you can.

**Change the manufacturers' default passwords** that devices are issued with, before they are distributed to staff.



**Consider using a password manager**, but only for your less important websites and accounts where there would be no real permanent damage if the password was stolen.



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# The four main causes of cash flow problems

The statement of cash flow is pretty much the culmination point for financial accounting. Its preparation can be very simple for some companies and highly complex for others, but this preparation is important in order for the company to perform cash flow analysis.

Cash flow analysis is an important exercise for any business to ensure its viability and competitiveness in the market. Without this, a business will have no idea whether or not it is still profitable and whether or not it still has the ability to pay its obligations.

Companies both big and small, start-ups or established, experience cash flow problems occasionally – some more than others.

This is the four most common causes of why some businesses experience cash flow troubles are:

## 1. Excessive Ageing of Receivables

Some businesses in an attempt to not strain any relationship with their customers or partners choose not to ask others for their money. It is an uncomfortable conversation for some, but the truth of the matter is, this has a huge impact on the business.

Another possible reason for poor collection of receivables is poor control of the invoices that are due. For many businesses, organizing and keeping track of the account receivables is a manual endeavour and so it is prone to errors. Companies with cash flow planning or forecasting software are off to a much better start than those that do it manually.

The payment that any business can get from the receivables is cash for the business which is why it is important to keep track and make the collection more effective to avoid negative operational cash flow.

## 2. Expenses are too high, Sales are too Low

Sales always influences a business' cash flow therefore if the sales are too low, it is good to immediately look at low hanging fruits for any business – meaning sales that can be easily made for the business such as upsells to existing customers or

increase in customer loyalty initiatives to reduce churn. Perhaps even more important is that analyses must be done on what the root cause of the low sales volume is.

It is also very important to look at the P&L statements especially on staffing, CAPEX, and OPEX because constantly high expenses with constantly low sales volume is not sustainable for any type of business.

## 3. Wrong Pricing

What many businesses do when they start up is that they bring their pricing down in order to attract the competition's customers.

After a few months or years, the pricing increases by small margins but no one really stops and ponders whether or not the pricing is correct given all other factors involved both in production and the market situation. Therefore, companies that do not take time to properly reassess their products' pricing and gross profit margins are companies that experience cash flow troubles.

## 4. Heavy Indebtedness

A business that incurs too much debt is very likely to experience cash flow troubles as this puts a significant strain on the cash flow.

This is one of the reasons why cash flow analysis is an important exercise some businesses may not realize how much cash is drained from debt repayments especially when large amounts of repayments are due.

Credit: DS Panel

# 10 Steps to prepare for the GDPR



**Nicola Barden**  
Associate –  
Harbottle & Lewis

In our last edition of the IABM Journal, Rebecca Collard of Harbottle & Lewis LLC gave us an outline of the forthcoming General Data Protection Regulation (GDPR). In this edition, Nicola Bardon, Associate at Harbottle & Lewis, gives us further advice on practical steps companies need to take in order to be ready for when the GDPR comes into force on 25th May 2018.

## 1. Awareness, training and accountability

The overarching principle of accountability, set out at Article 5(2), applies to all aspects of the GDPR. This means that the data controller is responsible for compliance with the principles relating to the processing of personal data and the rest of the GDPR. The other dimension of this is being able to demonstrate this compliance. This will involve keeping records of data processing activities and to ensure that your organisation is able to show the Information Commissioner's Office (ICO) that it is compliant with the GDPR.

Compliance will require the entire organisation to get involved and one of the essential but simple steps that you can be taking now to ensure compliance is to raise awareness in your organisation. Training all staff on the GDPR and your requirements to comply is key, but especially those who make major decisions or deal with personal data as part of their role. Board-level buy-in is essential and will ensure that compliance with the GDPR is a top-to-bottom priority in your company.

You might want to consider the appointment of privacy champions in each department. These would be advocates of good data protection and privacy practices and provide individual departments with initial advice on data protection queries. The privacy champions should be familiar with data protection processes, policies and escalation routes.

## 2. Data Protection Officers

Data controllers and data processors need to consider whether they need to appoint a Data Protection Officer (DPO). Data controllers and processors must appoint a DPO in the following circumstances:

- a) the processing is carried out by a public authority or body, except for courts acting in their judicial capacity;

- b) the core activities of the data controller or data processor consist of processing which requires regular and systematic monitoring of data subjects on a large scale; or
- c) the core activities of the data controller or data processor consist of processing on a large scale of special categories of data and personal data relating to criminal convictions and offences.

The DPO has a number of tasks outlined in the GDPR and businesses may wish to consider setting up a DPO team to support the role. Even if you don't meet any of these thresholds set out in Article 37, you may wish to consider appointing a DPO to assist with your GDPR compliance.

## 3. Internal reviews

Many data controllers and data processors are carrying out internal reviews or audits of the personal data that they deal with in order to examine current practices and policies and assess them for GDPR-compliant updates. This is usually done in the following phases:

### Phase 1: Management buy-in

- Secure your resources/budget and discuss DPO requirements.

### Phase 2: Fact finding

- Fact finding and interviews with employees.
- Gathering evidence in the form of policies, procedures, training modules etc.

### Phase 3: Gap analysis and to-do list

- Review all the responses.
- Create a to-do list.
- Identify risk areas for development and create a strategy to achieve full compliance in the light of these.





#### 4. Data protection by design and DPIAs

The concept of data protection by design and default requires data controllers and data processors to consider data protection rights in all of its processing activities and to implement appropriate technical and organisational measures to ensure that those rights are safeguarded.

Data controllers and data processors should begin to think about this now and start integrating data protection into your day to day business activities and when they are introducing new systems or designing new products for their business. They should also consider the use of Data Protection Impact Assessments (DPIA), understand what a DPIA is, when they need to be carried out and how they will go about this. The Article 29 Working Party (the group of EU regulators) has provided detailed guidelines on DPIAs, which are available via the IABM website.

#### 5. Consent

Under both the current data laws and the GDPR you must have a lawful ground under which to process personal data in order for your processing to be fair and lawful. One such reason is consent obtained from the data subject, and there are strengthened requirements to obtain adequate consent under the GDPR. Consent must be a '*Freely given, specific, informed and unambiguous indication*' of an individual's wish '*by a clear affirmative act*' indicating their agreement to the processing of their personal data, and under the GDPR the notice provided to the individual when consent is being sought must be:

- Clearly distinguishable;
- Easily accessible; and
- In clear and plain language.

Consent must not be conditional on other matters and must also be as easy to withdraw as to give. This means that pre-ticked boxes, silence or inactivity will not be sufficient and information in relation to the consent being sought cannot be buried in lengthy, dense privacy policies. Data controllers and data processors must be able to demonstrate that they have obtained consent and should therefore record the consent obtained.

## 6. Privacy notices

The GDPR requires data controllers to provide data subjects with concise, transparent, intelligible and clear information about the ways in which they use their information (through the use of privacy policies, privacy notices etc.) and minimum information must be provided to the data subjects at the point at which the data is collected or, if data is collected via a third party, within a reasonable period after obtaining the information. One step that you can take immediately is to review your privacy policy, review the notices that are provided on your website and check your marketing consents for compliance.

## 7. Individual rights and subject access requests

The GDPR strengthens the rights of data subjects and introduces certain new rights, such as:

- The right to have personal data erased;
- The right to restrict processing of personal data; and
- The right to data portability.

Data controllers and data processors should plan now how they will deal with requests from data subjects who wish to exercise these rights, and put policies and procedures in place to deal with them.

The timescale for responding to a data subject access request (DSAR) has been reduced from 40 days to one month and you should plan how you will deal with such requests in advance of the GDPR. It might be helpful to carry out a data mapping exercise to identify where personal data is being held and for what purpose. Organisations will need to be ready for a potential increased number of DSARs and have a procedure which makes it easy to respond promptly.

## 8. Review arrangements with third parties

Data controller-data processor relationships are much more regulated under the GDPR and data controllers are obliged to engage data processors which provide certain guarantees in relation to GDPR compliance. The processing by the data processor will have to be covered by a written contract which sets out certain prescribed terms. Unfortunately there are no exemptions for data processing agreements that are already in place so you need to update your data processor clauses and agreements before 25th May 2018.

In order to prepare for these changes, you should review and update data processor clauses in supplier agreements. For contracts that are already in place,

providing the new clauses to processors in an addendum to the current contract is a good way to avoid opening up negotiations in other areas of the contract.

## 9. Data breaches

For the first time in the UK, there is a requirement to notify the ICO and data subjects that a data breach has occurred in particular circumstances. You will have just 72 hours after becoming aware of a data breach to notify the ICO unless the breach is unlikely to result in a risk to the rights and freedoms of the data subjects affected. You must notify data subjects that a breach has occurred without undue delay if there is a high risk to their rights and freedoms. Due to the time restraints, it would be sensible to put a plan in place for reacting to a data breach and to have a 'dry run' to practise how to respond in case a data breach occurs.

Under the GDPR, you are required to keep records of data breached and, even if the breach does not need to be reported, the controller should still record:

- The breach;
- The facts relating to the breach;
- Its effects; and
- Remedial action taken.

## 10. International transfer of data

One of the big changes to EU data protection law under the GDPR is its extra-territorial scope. It applies to data controllers and data processors established outside the EU but processing personal data of individuals in the EU where the processing activities are related to:

- offering goods or services in EU; or
- monitoring behaviour in EU.

To ensure compliance, organisations should assess where their data is being processed, ensure that any branch offices outside the EU are GDPR-ready and check that they have appropriate safeguards in place. Organisations may also need to update their privacy policies to be transparent about where personal data is being transferred.

## Grandfathering

Finally, an important point to note during the preparation process is that the GDPR has no provision for 'grandfathering'; the new rules apply to old data. For example, you might need to obtain new consents as it is unlikely that consent obtained under the current regime will be compliant with the GDPR.



## IABM is the leading provider of data, research and business intelligence reports in the broadcast technology sector

Both qualitative and quantitative, our reports give members the vital business, technology and strategic information they need to stay ahead and thrive in the broadcast and media technology industry.

Our analysis helps track industry trends and the financial performance of the sector. Our quantitative research draws from a pool of real financial data provided by IABM members and non-members under NDAs.

Our qualitative research benefits from interviews with industry insiders and a wide directory of business information covering the broadcast and media industry as well as related verticals.

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Bitcoin's inventor, Satoshi Nakamoto, described Bitcoin as 'A Peer-to-Peer Electronic Cash System'

# A beginners' guide to #bitcoin #cryptocurrencies #blockchain #icos

How much do you understand about Bitcoin or cryptocurrencies? Do you know what Blockchain is, or what an ICO means? Here is a handy reference guide with some very useful links for more information.

## Bitcoin

Bitcoins are purely digital virtual coins exchanged directly between two parties online with no intermediary involved. The appeal of Bitcoin is that it is not controlled or backed by any bank or central government authority – in that sense, you could think of it as a massive disruption in the world of fiat money as we know it. Bitcoin's inventor, Satoshi Nakamoto, described Bitcoin as 'A Peer-to-Peer Electronic Cash System' in the original 2009 Bitcoin whitepaper. To date, this is probably still the most simple and accurate description for a Bitcoin.

The Bitcoin protocol is also hard-limited to 21 million bitcoins, meaning that no more than that can ever be created/generated through the year 2140. No central bank, individual or government can come along and simply 'print' more bitcoins when it suits them. In this sense, Bitcoin, like other cryptocurrencies, is a deflationary currency, and as such is likely to continue growing in value as supply is limited but demand could grow exponentially over time.

Best descriptions of Bitcoin that I have come across:

<http://bit.ly/2zwIDB3>

Official Bitcoin site with a good glossary of terms:

<http://bit.ly/2zxp0ZV>

Excellent set of FAQs here: <http://bit.ly/2zxhC04>

## Cryptocurrency

The Telegraph recently published an excellent article explaining Cryptocurrencies where it defined these as currency associated with the internet that uses cryptography, the process of converting legible information into an almost 'uncrackable' code, to track purchases and transfers. The underlying principle is that it is a form of digital money that is designed to be secure and, in many cases, anonymous.

Bitcoin is probably the first known cryptocurrency, but since its introduction, there has been a proliferation of other cryptocurrencies with estimates of over 1000 available now and yet many experts believe that this is simply the beginning for digital money. Ethereum is probably the second most popular and well-known currency token used in the ethereum blockchain. Others such as Ripple and Litecoin too have gained popularity in the recent past and have seen some level of mass-scale adoption along with some banks early-adopting them.

The original Telegraph article: <http://bit.ly/2zvKg1U>

Excellent FAQs on cryptocurrencies:

<http://bit.ly/2zvQZsD>



There has been a proliferation of other cryptocurrencies with estimates of over a 1000 available now and yet many experts believe that this is simply the beginning for digital money

## Blockchain

The Blockchain technology was originally developed as a part of the digital currency Bitcoin and was meant to be a public record of all Bitcoin transactions in chronological order. But now blockchain can support a wide range of applications, and is already being used for P2P payment services, supply chain tracking and more. A blockchain maintains a growing list of ordered records, called blocks. Each block has a time-stamp and a link to a previous block.

In the case of Bitcoin, the blockchain is shared between all Bitcoin users and is used to verify the permanence of Bitcoin transactions and to prevent double spending. All confirmed transactions are included in the block chain and that enables Bitcoin wallets to calculate their spendable balance and new transactions can be verified to be spending bitcoins that are actually owned by the spender. The integrity and the chronological order of the block chain are enforced with cryptography.

A simple example of a blockchain application from the Forbes article is of a digital medical record: each entry is a block. It has a timestamp, the date and time when the record was created. And by design, that entry cannot be changed retroactively, because we want the record of diagnosis, treatment, etc. to be clear and unmodified.

Only the doctor, who has one private key, and the patient, who has the other, can access the information, and then information is only shared when one of those users shares his or her private key with a third party – say, a hospital or a specialist. This describes a blockchain for that medical database.

Security is built into a blockchain system through the time-stamping server and P2P network, and the result is a database that is managed autonomously in a decentralised way. This makes blockchains excellent for recording events, transactions, identity management, and proving provenance.

Forbes beginners guide to Blockchain:

<http://bit.ly/2zwFwY>

Nice FAQs and other information on blockchain:

<http://bit.ly/2y4V7eZ>

## ICO

An ICO, expanded as 'Initial Coin Offering' (derived from Initial Public Offering or IPO), is a fundraising tool that trades future cryptocurrencies in exchange for cryptocurrencies of immediate, liquid value. You give the company raising the ICO, bitcoin or ethereum, and you get some of a new company's own Coins with the promise of them becoming the next Bitcoin (give or take!).

The FT published their take on Bitcoin and ICOs in May 2017, describing them as 'unregulated issuances of cryptocurrencies where investors can raise money in bitcoin or other cryptocurrencies' which is accurate, especially if you underline the word 'unregulated.' Many fear ICOs, which are trying to market themselves as an alternative to venture capitalists as a way of raising cash for businesses, breach existing securities law that applies to fundraising and information sharing.

Simply put, ICO 'coins' are essentially digital coupons, tokens issued on an indelible distributed ledger, or blockchain, of the kind that underpins a crypto-currency like Bitcoin. That means that ICOs are issued to raise funds in a reasonably unregulated manner and the coins issued can then easily be traded, although unlike shares they do not confer ownership rights on the holders. So the company raising funds through ICOs raise the funds they need in liquid cryptocurrency with no regulatory oversight but have to give up no equity in return and the investors could possibly get earlier liquidity on their holdings! Sounds too good to be true but until real regulation kicks in, it is!

Economist article on ICOs: <http://econ.st/2y3es09>

FT article on ICOs: <http://on.ft.com/2y2vgEr>

Very useful FAQs on ICOs here: <http://bit.ly/2y1LMof>

## Final thoughts

As more businesses and governments accept Bitcoin, the future of Bitcoin and cryptocurrencies looks more promising than ever. With all the headlines surrounding Bitcoin, Ethereum, and other popular cryptocurrencies, you might be thinking it's time to invest a few hundred dollars just to get in the game. But where would you start? Crypto exchange? Alpha-numeric codes? Mining software? Wallets?

Blockchain is a truly disruptive technological advance that will have wide-reaching implications which will not just transform the financial services but many other businesses and industries. There's never a better time to get involved and start the learning process in my opinion.

## Credit to:

Omkar Joshi – highly opinionated executive/entrepreneur with views on strategy, sport, strategy-in-sport, entrepreneurship, business development, investment strategy, all things B2B, finance, kids and pretty much everything else!

# Reimagine everything



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YOUR PLATFORM  
TO THE **CLOUD**



# Maximizing media assets with cloud technology



**Craig Dwyer**, *Senior Director Global Center of Excellence, Avid*

Extending media production to the cloud – in the way that best suits an organization's unique operational realities – opens the opportunity to both increase production capacity and ease the financial burdens of content creation and distribution. Media organizations gain the licensing flexibility and business agility to align their technology solutions with the needs of their production environment. They can also connect and collaborate from anywhere, whether through a workstation, laptop, or mobile device – all while increasing efficiency across every facet of the media value chain.

With cloud-enabled workflows, media organizations can grow viewership and brand affinity, connect with their audiences in new ways, and fully protect their assets by operating in a secure environment. It's easy to scale resources as needed to address peaks in demand, whether anticipated or not, and tap into massive economies of scale across workgroups and departments.

The flexibility and elasticity of cloud services enables media organizations to maximize the value of their assets by expanding to new outlets. They can repurpose material to exploit new revenue streams and grow brand affinity across a broader range of viewers by making content available everywhere they want to consume it, whether on TV, online, or on a mobile device.

The cloud provides some unique capabilities for media asset management (MAM) projects. The cloud can be used to help the environment scale on demand such as when content needs to be quickly transcoded or processed. If the assets are available in the cloud, processing jobs can be initiated on demand and scaled up, and then down again as required.

An increasing number of media organizations are considering cloud-based deployments for several reasons:

- MAM systems can act as a content hub for multiple regional sites to enhance collaboration.
- MAM systems can act as a central repository for media storage across multiple tiers of storage in the cloud or as a system to host content while the cloud-based systems run AI processes and extract metadata.
- MAM systems in the cloud add the flexibility to be able scale dynamically as the business demands.

Media organizations are looking for ways to incorporate more data into MAM systems as data – particularly viewership data and data for targeted advertising – becomes more essential.

They are building a data-warehouse / business intelligence (BI) approach to analyse audience data. This analysis is then used to inform the editorial planning, and the MAM systems are playing a part by making the reuse and reformatting of content as efficient as possible.

Using new machine learning and content analysis technologies in the cloud enables search and content discovery of archives with limited metadata to be discoverable in production timescales. In addition, MAM systems in the cloud can be very easy to implement using templated deployment methods.

Maximizing the value of assets is only becoming more important in today's always-on and connected entertainment ecosystems. MAM systems continue to be the framework clients use to connect tools and systems across the content lifecycle. When we add the cloud attributes of easier deployment, elastic scaling, new machine learning and content analysis tools, we predict that MAM will continue to grow in importance across the entire media supply chain.

The inaugural Avid Customer Association (ACA) Vote, which gave Avid's customer community the unprecedented opportunity to directly influence Avid's future offerings, revealed that most media professionals (71.7%) are considering moving some part of their infrastructure or workflow to the cloud over the next two years. However, just 4.8% are considering moving their entire infrastructure and workflow to the cloud.

This highlights the important role that hybrid cloud deployment models will play in the media industry's future. Media organizations must ensure that they deploy cloud workflows that give them the flexibility to create, distribute, and monetize their content using the deployment type that works best for them – on premises, private data center, public cloud, or hybrid.

In the case of media asset management projects in particular, it's important to understand and then design the system to match the media organization's needs and economics. Looking carefully at the content lifecycle and understanding the media flows to ensure you understand all the operational, technical and economic impacts will help to inform the best way to design the architecture.

In many cases, that may still have on-premise elements but be able to scale in the cloud when required through a hybrid deployment model. Usually, a hybrid approach is more effective with metadata and proxies in the cloud to improve collaboration and asset reuse, while storage subsystems are kept in the on-premises environment.

Avid is leading the media industry's ability to handle full-scale media production in the cloud. We're working closely with Microsoft to offer innovative cloud solutions that work in concert with the Avid and Alliance Partner tools and services that our customers already use.

Our solutions have been installed in some of the most cutting-edge installations, including the recent RIO Olympics

# IABM members speak – MuxLab



**Joe Teixeira**  
*Product Manager,*  
*MuxLab*

## **Tell us about MuxLab – when it was founded, what problem did you solve, what were your first products and markets?**

MuxLab was founded in 1984, and although we've evolved immensely since those first early days, our main mission continues to be the same: to provide our customers with innovative and industry-leading designs. We were founded on the principles of quality, performance and reliability – that has always been consistent. Some of our very first products served the security market with the access and delivery of CCTV signals. Since then, we've grown to encompass signal integration and delivery in the broadcast and professional AV markets. Today, we are spearheading advances in comprehensive AV over IP solutions, which are proving to be a foundation today for tomorrow's AV systems in many different markets.

## **What has driven the evolution of the company, and how large is MuxLab today?**

We've enjoyed a tremendous amount of steady growth over the years, expanding our solutions as we identify and anticipate the industry's trends and directions. MuxLab is very fortunate to be in a leading position in the professional AV market today. Our solutions have been installed in some of the most cutting-edge installations, including the recent RIO Olympics. They are also the cornerstone of many behind the scenes installations in universities, studios, restaurants, hotels, entertainment facilities...the list goes on and on.

## **What sets MuxLab's products apart from your competitors – why should customers buy from you; what is your 'special sauce'?**

Above all, MuxLab strives to not only provide the most advanced products for AV installations of all shapes and sizes, we work diligently, as a team, to make sure our customers have the best level of support possible. This

goes way beyond video trainings and presentations. We will walk, hand-in-hand if necessary, with our customers through any install to make sure the end result is the best one possible. That one-on-one level of service is unique in this industry, where manufacturers can sometimes get lost behind the installers. We make sure we are available and collaborate with all of our customers – that's our key difference.

## **You operate across several verticals – CCTV, ProAV and now Broadcast. I understand that you first considered moving into broadcast 18 months ago, but felt the time wasn't right. What's happened since then to change your mind?**

The technologies have advanced to the place where we can support that industry with our expertise. Years ago, 4K over IP was a dream. Compression formats were not up to par. Latency issues have since been resolved that now make our flagship products – our AV over IP solutions – ideal for broadcasters. With the recent release of SMPTE ST-2110 standards to alleviate any concerns regarding uncompressed video traffic and delivery over managed IP networks, we're right on board with ST-2100 ready solutions. We knew this moment was coming and strategized to strike when the time was right.

## **Are the challenges in broadcast and media different from your other markets? – and if so, what are they – and where do you see the opportunities opening up?**

At our level – the technical, often behind-the-scenes level – the issues are pretty similar. Fundamentally, it's all about taking content, or AV signals, and moving it around quickly in order to deliver it to the right place at the right time with the perfect outcome. That's really simplifying it, but those are the general goals. Some broadcasters are more concerned about live news feeds, mobility with their trucks and those kinds of issues, while integrators working in hotels have other issues, but the overarching goals are the same: deliver flawless content whenever and wherever it's needed. This can, of course, be compounded by the number of sources and displays, distances reached, video formats, etc., but every install has its own unique challenges. Our job is to overcome them.

**What is your sales structure? When did you move into international markets and how do you handle long-range support?**

MuxLab works very closely with specially selected sales professionals in key geographical areas to provide local support and remain in contact with our customers around the world. While our main team is accessible at headquarters, our local representatives are available in “real time” to perpetuate communications at the local and regional level. This helps to speed the delivery of any support needed on the installation scene. Of course, we also travel throughout the year to all the major continents for trade shows and conferences, and take full advantage of those times to meet face-to-face with our customers and partners.

**You joined IABM shortly after deciding to move into the broadcast and media space. What influenced this decision? What do you foresee as being the most useful IABM resources for you, and how will they help you achieve your business objectives?**

The IABM is a great resource for MuxLab! In addition to the events where we can collaborate in small groups or even one-on-one, we enjoy the access to resellers and installers in the industry. The deep levels of insights and analysis are also a huge advantage to us as we are always keeping an eye on trends based on viable statistics, in which IABM excels.



*MuxLab's HDMI/USB 2.0 Extender Kit transmitted 4K@60 video for the "David Bowie Is" exhibition in Italy's Bologna-based MAMBO. The exhibition, which traces the life and artistic evolution of David Bowie, is a truly multi-sensory experience that engages visitors with vivid projections and songs that have marked the artistic life of this music legend.*

*Installed by 3P Technologies, the fully synchronized MuxLab solution links to the network of MAMBO and is remotely managed. MuxLab's flawless delivery of uncompressed HDMI was critical to this prestigious project in an environment that required invisible but reliable solutions.*





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Course Title	Day	Start Date	Region
IP Network Essentials for Engineers	Wed	10-Jan-18	UK
High Dynamic Range & Wide Color Gamut	Tue	23-Jan-18	UK
Understanding the Broadcast and Media Industry	Tue	13-Feb-18	UK
IIP Network Essentials for Sales & Technical	Mon	05-Mar-18	UK
IP Network Essentials for Engineers	Tue	06-Mar-18	UK
Advanced IP Networks for Engineers	Thu	08-Mar-18	UK
Audio and Video Fundamentals for Engineers	Tue	20-Mar-18	UK
Broadcast Technology Workflows	Thu	22-Mar-18	UK

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# IABM UPDATE...

We are pleased to welcome Amazon Web Services, Google, Piksel and SAM as Platinum members

## PLATINUM MEMBERS



## Start-Up membership



**IABM has introduced a new 'Start-Up' membership category. As its name suggests, the new membership category is designed to cater for new companies that have been incorporated for less than two years, enabling them to benefit from the full range of IABM membership services to support them at a critical time in their growth and development, all at a manageable price for what are typically cash-poor, ideas-rich businesses.**

Start-Up membership includes full access to IABM's growing portfolio of business intelligence insights and analysis, its industry-wide knowledge vault and technology services, skills and education, events and networking, and discounts on floorspace with access to member lounges at key exhibitions as well as entry to IABM's industry-leading awards at NAB Show, IBC and Annual Awards.

Salsa Sound, founded in 2017 by Dr Rob Oldfield and Dr Ben Shirley, specialises in immersive live sports broadcasting audio, and is the first Start-Up to take advantage of the new membership category. "As a young tech Start-Up, we are often hard-pressed on time and resources so being a Start-Up member of IABM is an essential step for us," said Oldfield. "The support we have access to, from training through to first-hand industry insight and contacts, is invaluable and a time saver for us, so is a must as we forge our way in the broadcast industry and helps us establish and maintain a strong business proposition. The services provided by IABM for Start-Up

members are having a huge effect on us as a young Start-Up and we'd recommend it to everyone."

"Start-Ups are the source of many of the breakthrough developments in the broadcast and media technology industry," said Peter White, IABM CEO. "Having myself been involved in Start-Ups, I know only too well that opportunities for growth and development are often hampered by lack of time, resources and budget to expand their footprint fast enough to put their new ideas in front of the right audiences in a timely manner. To me, IABM Start-Up membership is a no-brainer for new companies in our industry.

"By opening up discounted access to the full range of benefits that our regular membership offers, we are giving Start-Ups a helping hand that will be invaluable at a critical time in their lives. And of course, when they mature, they will already be conversant with the enormous range of support on offer from IABM, so this is also enlightened self-interest; we are building our future membership too," White concluded.

## Where you can see us next

We will be present at a number of shows over the next few months where members can take advantage of a variety of member benefits



**CABSAT**

**14 – 16 January 2018**

Dubai World Trade Centre,  
Dubai, UAE



**BVE**

**27 February – 1 March 2018**

EXCEL, London, UK



**Convergence India**

**7 – 9 March 2018**

Pragati Maidan,  
New Delhi, India



**CCBN**

**22 – 24 March 2018**

CIEC, Beijing,  
China



## John Ive – Honorary Member

**A Lifetime Honorary IABM Membership has been awarded to John Ive, BA, MIET, CEng, Life Fellow SMPTE, RTS Fellow & Silver Medal Holder.**



John joins an exclusive club that is a veritable 'Who's Who' of people who have had an enormous impact on the broadcast industry as it has grown and developed over the last 40+ years. This illustrious group includes Alan Brill, Roger Crumpton, Larry Kaplan, Lyle Keys, David MacGregor, Mike Martin, Derek Owen, Peter Owen, John Ross, Martin Salter, Clyde Smith and Roderick Snell.

John joined the BBC in 1972 after graduating from Essex University with a BA in Electronics. His first job with the corporation was to install and maintain its first digital audio links originating from Broadcasting House in London. He left the BBC in 1974 to join the IBA – the UK's commercial television regulator at the time – where he worked on its seminal Dice digital standards converter and pioneering digital video recording technology. In 1978 Ive was recruited by Sony Professional Europe – one of its first 16 employees – and began a 28-year career that saw Sony's European R&D team take a worldwide lead in many breakthrough developments, including the processing for the first D1 digital video recorder, helping to drive the massive transformation in the industry from analogue to digital workflows. He subsequently headed the European product management team and following that was appointed as a director within Sony Professional Europe.

During this time, John was also one of the instigators and a director of the influential ProMPEG Forum – an early example of the kind of positive collaboration that the industry is increasingly moving towards today. He also played a central role in standardisation activities throughout the 1980s and 90s with SMPTE and the EBU.

John has been an active member of IABM throughout his career, and in 2008, joined the association under the leadership of Roger Crumpton. As the Association grew he became the Director of Technology and Strategic Insight to help drive the IABM's engagement with other industry bodies, in addition to contributing his experience while championing members' interests. His unique combination of extensive technical, operational and business knowledge plus the ability to communicate, has seen him chairing many international industry conferences, and he has also been the driving force behind IABM's own Annual Conference for a number of years.

John Ive has made an enormous, continuous contribution to our industry over more than 40 years and richly deserves this recognition. His energy and drive, combined with his intuitive understanding of our industry and his natural ability to communicate, have also been invaluable in helping to develop IABM into the wide-ranging, authoritative organization that it is today.



## IABM GLOSSARY OF TERMS

### A one-stop, online knowledge base for everyone involved in broadcast and media

Invaluable for understanding and keeping up to date with the technologies that make our industry tick.

The Glossary is a living resource, using IABM's own technology experts to add definitions and explanations of new developments as they happen across the industry.



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## IABM ANNUAL INTERNATIONAL BUSINESS CONFERENCE & AWARDS



### 2017 Award Winners

The awards recognize outstanding achievement in three key areas of the broadcast and media technology industry: the flow of young talent into the industry; technological innovation; and creative collaboration between technology vendors and end-users. A fourth award – Honorary Membership of IABM – is made to an individual who has played a major role in the development of the industry and contributed to the advancement of IABM over the course of their career.

#### IABM Young Person of the Year – sponsored by ARRI



Aleksei Bukhalov is studying for a Master's Degree at the St.Petersburg State University of Film and Television. His dissertation is on applications of eye-tracking in the media industry – highly relevant to immersive technologies such as virtual and augmented reality. Aleksei was selected by IABM as one of the students it takes to NAB and IBC every year to give them an inside view of the industry. "Aleksei grabbed the opportunity to visit IBC this year with both hands; he came with a plan to extract maximum benefit and fulfilled it. The academic and practical insights he took away will greatly benefit his studies and subsequent career in the industry," said IABM Head of Training, Andy Jones.

#### IABM Peter Wayne Award for Design and Innovation



All the winners of the IABM's NAB Game Changer Awards and IBC Design & Innovation Awards are automatically shortlisted for the year's top broadcast and media technology prize – the Peter Wayne Award for Design and Innovation. The judges faced a daunting task in selecting the eventual winner:

##### **EVS – X.ONE Single operator live multi-cam production**

The judges said: "Today's consumers expect access to more live events than ever before. it's not only traditional broadcasters but also brands, media companies, social media and internet platforms that need to produce broadcast-quality live content using smaller-scale resources. This product is the future of event coverage."

Highly Commended awards were presented to  
**Neulion and VizRT**

## IABM Creative Collaboration Award – sponsored by Aperi



This new award celebrates ground-breaking innovations that have been realised through creative collaboration between technology suppliers and their customers. It is yet another initiative in the Association's drive to bring the interests of technology vendors and their broadcast and media customers ever closer together. It seeks to recognize break-

through solutions resulting from close partnership between technology supplier(s) and their customer that provide measurable commercial or creative benefits to the customer. The first winner of this award is:

### **SDVI Corporation with Fox Networks Group, Discovery Communications and Turner**

SDVI Rally is a media supply chain manager that optimizes the infrastructure of a media facility, enabling dramatic improvements in utilization and time to revenue. Rally product development requires intimate knowledge of how existing operations will transition to a virtualized infrastructure. SDVI established special relationships with Fox, Discovery, and Turner in which each company worked directly with SDVI in an agile, continuous planning, development, and evaluation process centred on each company's targeted use cases. One of the judges commented on the winning collaboration: "I love this. The idea of working with the customer to understand what they want to achieve and embedding them in the agile development process is in many ways the ultimate expression of creative collaboration."





# IABM UPDATE...

## IABM DC launches GMVR Essentials – new category-specific reports will open up concise, business-specific information to all

**Timely introduction will be invaluable to all broadcast and media technology companies planning for 2018 and beyond.**

IABM DC has launched **GMVR Essentials**. Using individual category data from IABM DC's industry-leading Global Market Valuation and Strategy Report (GMVR), GMVR Essentials enables every broadcast and media technology company to access critical information on just the individual product and/or service segment(s) in which their company operates – at a price that makes compelling sense to underpin their business planning.

GMVR Essentials reports include essential market data tables and sizing for specific categories of products/services as well as a strategic overview of industry trends, regional dynamics, and emerging technologies – offering laser-focused, authoritative and comprehensive data and market trends.

There are 22 GMVR Essentials Reports available; these are listed on the IABM DC website, with a summary of the contents, as well as pricing information. GMVR Essentials are available to both members and non-members of IABM – the former at preferential prices. GMVR Essentials reports also include a comprehensive, 120 page, strategic industry overview, giving an authoritative picture of key facts and trends across the whole broadcast and media industry – providing essential context for business planning.

As part of the GMVR Essentials initiative, IABM DC is also able to produce a la carte GMVR Essentials reports, allowing companies to pick and choose the elements essential to their businesses.

We have launched GMVR Essentials in response to requests from companies that only presently operate in a narrow sector of the market but who need accurate data, sizing and forecasting just as much as larger, broader organisations do. GMVR Essentials answer this requirement, and also give companies solid information to assess potential new market areas.

GMVR Essentials will turn strategic planning for 2018 and beyond into a much more informed process and prove to be a great investment. And as well as focusing planning,

GMVR Essentials reports will also provide a credible, authoritative background for companies' 2018 budgets – invaluable for board approval and investor confidence.

Produced by IABM DC, a JV between IABM and Devoncroft Partners, The Global Market Valuation and Strategy Report (GMVR) is the most comprehensive model of the broadcast and media technology industry available, and includes detailed regional splits, product and segment analysis, and forecast trends for the ensuing five years. Encompassing data on more than 2,000 industry product and service suppliers, the GMVR provides comprehensive analysis, market sizing and forecasting for more than 150 product categories. The data behind the GMVR is highly granular – right down to specific product and service types. This highly detailed market information is unique too – the result of industry-wide participation by both buyers and suppliers of technology – delivering the most authoritative and wide-ranging information and planning resource in the industry.

GMVR Essentials reports use segment-specific information from the parent GMVR, so draw on the same authoritative data and reporting, but limited to specific product segments. The Strategic Industry Overview included with all GMVR Essentials reports allows GMVR Essentials reports to be viewed in the context of overall market trends and drivers, regional dynamics and emerging technologies, providing a credible, authoritative background for business planning.

### About IABM DC

IABM DC provides sought-after market intelligence on broadcast and digital media technology market sizing data to suppliers and purchasers of media technology worldwide. IABM DC is a joint venture between broadcast and digital media trade association IABM and Devoncroft Partners, an organisation that specializes in broadcast and digital media market research, strategic consulting and analysis.



**IABM DC**  
DIGITAL MEDIA MARKET INTELLIGENCE

NEW

Broadcast and  
Media Technology

# GLOBAL MARKET VALUATION AND STRATEGY ESSENTIALS REPORT

- ◆ Product/service category-specific reports generated from the most comprehensive database of its type in our industry, the GMVR.
- ◆ Provides precise and relevant data that's essential for your business planning.
- ◆ All reports and data tables include a comprehensive 120 page strategic overview covering the entire broadcast and media technology sector, helping you understand the trends that are driving our industry forward and position your business within it.
- ◆ Available for a variety of market categories.



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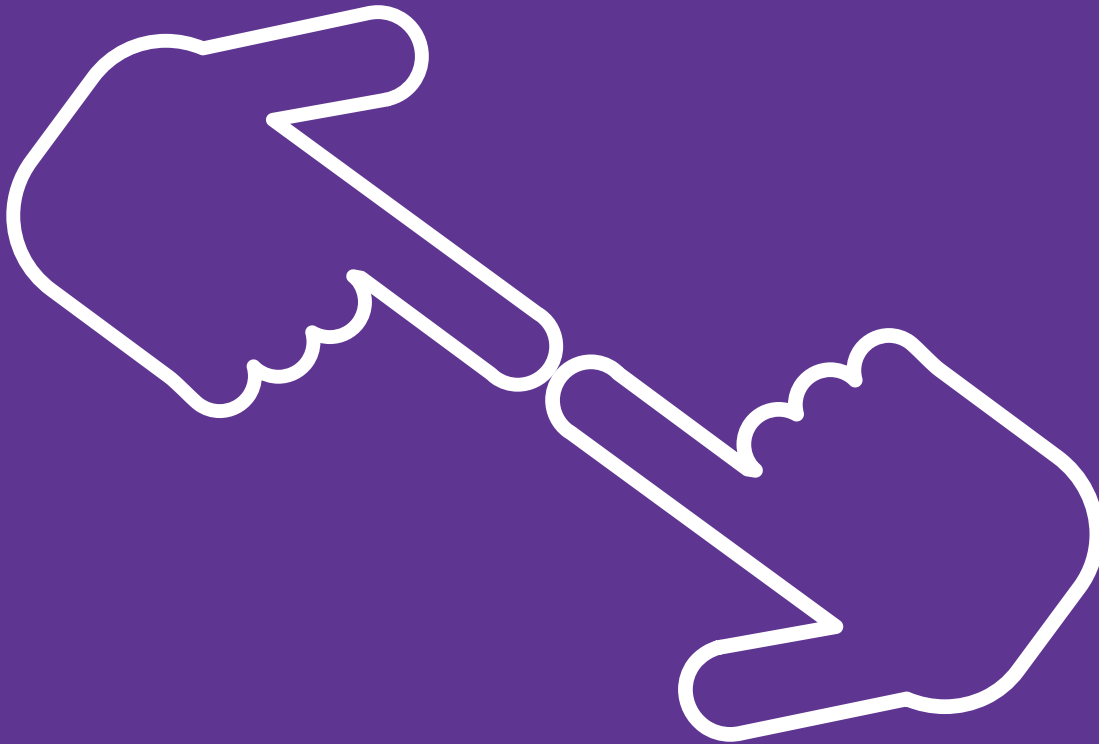




# IABM MEMBERS







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**IABM**

# ANNUAL INTERNATIONAL BUSINESS CONFERENCE AND AWARDS – REVIEW

**Elevating Business** – Media  
& Technology Working Together



Representing vendors globally across the  
digital media and entertainment industry



# IABM ANNUAL INTERNATIONAL BUSINESS CONFERENCE & AWARDS



## Takeaways from the Conference 2017

All the presentations, panels and discussions from this year's Annual International Business Conference are available for members to watch via the IABM website – [www.theiabm.org/iabm-annual-conference-presentations/](http://www.theiabm.org/iabm-annual-conference-presentations/). We followed up with a few questions to some of the speakers to give readers further insights. Read on for some tasty extra takeaways!

### Keynote: State of the Industry

John Footen set the scene for the conference with an engaging opening keynote that examined the current state of the industry and where we need to take it in future. How does the rise of OTT and mobile impact content creators and distributors – and what's the impact on the technology they use? How important is IP and cloud, and where should we be focusing most attention?

**John Footen, Managing Director,  
Deloitte Technology Strategy and  
Transformation Practice**



#### ■ What is driving the huge changes our industry is going through at present?

The biggest driver of change in our industry is that we have crossed the threshold where commodity technologies can perform at the levels needed for professional media. This has driven the 'special sauce' in our space out of hardware and into software. The move to software has enabled all kinds of changes such as new infrastructure options like cloud and new business models for vendors like SAAS.

#### ■ You said that in the future everyone will be a consultant. Please explain what you mean.

As things have become more commoditized – yet at the same time – complex, there is less focus on

technical detail and more focus on business outcome. This means that every player in our space will need to be a consultant in the broadest sense. Everyone will need to talk to the business, understand business problems, and assure business outcomes.

#### ■ What are the things we need to do right now to keep our industry healthy for the future?

I think there are a couple things. One is that we have to get a lot more agile and modular in how we work with our clients. The days of the big-bang project and waterfall approach are over. We need to do things in smaller pieces and with greater flexibility to react to changes along the way. The second is we need to do the same things with regards to business models. We need to allow customers to buy in smaller increments or to just receive services instead of licensing software. This will give the media companies the flexibility they need to compete and keep us all healthy.

#### ■ Why are you confident that 'we'll be fine'?

In my heart I am an optimist. I think our industry has already made a bunch of the right moves and I think we are thinking appropriately about the future. This means that we will not likely be blindsided like some other industries have been. We will adapt to these changing circumstances and everything will be just fine.



## Keynote: Don't be invisible: doubling your pipeline with effective social selling

"In a world of social media and social selling, much of your current marketing effort is wasted and most companies remain invisible to potential customers," says Alexander Low. "It's no longer enough to publish the occasional press release or LinkedIn status update: social selling needs to be a strategic part of your sales and marketing operation, driving new leads into your pipeline and maximizing the use of effective content."

**Alexander Low, Director of Social Selling & Account Based Intelligence, Digital Leadership Associates**



- **You said: "Anything that cannot be digitized or automated will become very valuable." Can you give us some examples of the kind of things you mean?**

It seems that every day something that one thought couldn't be digitized or automated, is – just look at the very recent news on DeepMind and learning chess and the Boston Dynamics robot doing a backflip – google it: amazing and scary at the same time. For me, this is looking at the very essence of what makes us, well, us. No one can define what consciousness actually really is, that gut instinct based on life experience. That said, we are moving more and more into data-led decision making, so who knows what the future will hold.

- **Whose or what kind of jobs will be safe – or is that the wrong question?**

For me that is the wrong question – yes there will be some roles that will be lost – just look at driverless cars and lorries as to where that may take us. One could argue that fighter pilots' jobs have been lost – but new ones are created: they now fly the drones remotely. Social Media roles didn't exist 10 years ago, Data Science roles were for people in lab coats – now they are mainstream. Those that choose to want to learn, understand what this means for them in their roles, then look at how they can have the technology augment what they do. Then if your role morphs into another, you will be well placed to morph with it.

- **I heard a number of very senior people in the room say they're not on social media. Assuming that you think they all should be, how would you advise them to get started?**

Give me a call.

- **You talked about 'making your personal digital brand reflect your human-only traits that make you, you'. Many people are wary of crossing the line from professional to personal. Any guidelines you can give on this?**

I find this so bizarre in today's world. I do not see this as crossing the line between professional and personal. I do not share anything 'personal' online from my professional brand, what I do share are my professional thoughts and views in exactly the same way as I did on stage, or in a face-to-face meeting. Your digital presence (if you have one) is likely to be where you are first met – so why would you not want that to reflect who you are in your professional life? Sales directors don't follow their reps to every single meeting to make sure they are saying and doing the right thing, so why would you not have that same trust online?

- **Finally, what were your top takeaways from other sessions at the IABM conference?**

Hearing the IABM CEO talking about the disruption the industry is facing, when he had the slide up showing the different themes that have been discussed – I could have been sitting in a Financial Services, Legal, Business Services industry conference – no business, in any industry, is immune to this. Then hearing Adrian from Liberty Global speaking about how the demands of their customers are changing, so they have to change to meet these, and they expect their vendors to recognise and change the way they do business.





Dragon tip: Keep it snappy and to the point and try and stick within the five-minute limit, be confident and engage with the audience



## Special Item: The Dragons' Den

In the ever more rapidly changing world of broadcast and media technology, never has timely innovation been so crucial to success. Recognising this, IABM introduced a vibrant new strand at this year's conference – the Dragons' Den. Three entrepreneurs were given five minutes each to pitch their latest ideas to a panel of experts – and the audience. Three high quality presentations made it a very close contest – with Dr Rob Oldfield of Salsa Sound the eventual winner. Here's what the contenders pitched and their comments.

**Dr Rob Oldfield, Co-Founder and Director, Salsa Sound**



### ■ Please give us a summary of what you were presenting at the Dragons' Den

I presented innovative broadcast tech startup Salsa Sound that I co-founded in July 2017. My presentation at the Dragons' Den covered how we are making Quality and Efficiency improvements in the broadcast audio production of live football through our automated and augmented mixing technology. I also highlighted how our patented technology can provide useful metadata for other parts of the broadcast chain. I communicated this by having three footballs on stage representing the three 'goals' of our technology (Quality, Efficiency and Data), kicking each into a pop-up goal on stage when summarizing my points at the end of my presentation.

### ■ Based on your experience at the conference, what advice would you give to other people presenting their ideas in a Dragons' Den?

Keep it snappy and to the point and try and stick within the five-minute limit, be confident and engage with the audience.

### ■ Is the experience different from presenting your ideas to potential buyers – and if so, how?

It was different pitching to a larger audience and really good practice to only be given a strict five-minute time limit. I focused more on the broad-brush aspects of the technology rather than the commercial model details. It was also different to talk to the Dragons and the audience at the same time, knowing there were some difficult questions coming from the former at the end of the pitch!

### ■ What would you change if you were to present at another Dragons' Den?

I would probably reduce the amount that I tried to share so I was not rushing so much at the end. You don't have to communicate everything, just enough to get everyone excited about it.

### ■ Finally, what were your top takeaways from other sessions at the IABM conference?

I found the conversations/sessions around the move to IP and remote production really interesting. I was also inspired by René's motivational keynote and what it is to be a leader through culture and finding your 'spike'.





### Ian Sharpe, CEO, Promethean TV



#### ■ Please give us a summary of what you were presenting at the Dragons' Den

The Promethean team has created and wholly owns a platform that delivers interactive overlays into any live and on-demand video. Powered by Promethean, any broadcaster can serve intelligent commerce and engagement opportunities to viewers in real time.

#### ■ Based on your experience at the conference, what advice would you give to other people presenting their ideas in a Dragons' Den?

Erm – prepare for things to go wrong? Seriously, know your material inside out. So when things go wrong – through tech hiccups or errant questions, you can pivot and proceed.

#### ■ Is the experience different from presenting your ideas to potential buyers – and if so, how?

Yes, it's a five-minute affair as opposed to hours of meetings, business plans and due diligence.

#### ■ What would you change if you were to present at another Dragons' Den?

Set up time so plug-and-play is a reality... Get real investors from VCs as Dragons, people used to putting money where their mouth is. Remove the audience vote – they aren't investing.

#### ■ What were your top takeaways from other sessions at the IABM conference?

Dragons' Den format was a great change of energy, and a welcome format change from 'death by PowerPoint'.

### Neil Anderson, Director, NMR

#### ■ Please give us a summary of what you were presenting at the Dragons' Den

I was pitching the Realtime Content Analysis and Processing (ReCAP) Project – an EU funded, consortium led, Machine Learning software product development. ReCAP analyses live video feeds and batch processes existing video and audio content, to automatically identify faces, logos, objects, Automatic Speech Recognition (ASR) and on-screen

text extraction (OCR), to aid fast turnaround production workflows, improve QC, compliance and rights management challenges and for archive content metadata enrichment.

#### ■ Based on your experience at the conference, what advice would you give to other people presenting their ideas in a Dragons' Den?

Practise your five-minute pitch – it's over before you know it! Do try and show off your product if possible. Try and finish with something memorable for the voters to remember you by.

#### ■ Is the experience different from presenting your ideas to potential buyers – and if so, how?

Absolutely, Machine Learning is a new and interesting subject to almost everyone we speak to and there is plenty to discuss, which takes longer than five minutes!

#### ■ What would you change if you were to present at another Dragons' Den?

I'd make sure I got to show off the product, before running out of time!

#### ■ Finally, what were your top takeaways from other sessions at the IABM conference?

I really enjoyed the conference sessions – especially the B2B technology sales training session – it was an interesting day overall.





Kids' Remote, which is a first-of-its kind TV remote designed specifically for children

## Keynote: Keeping it lean: the story of TalkTalk's product development approach

As broadcasters and operators increasingly take a product-innovation approach to developing new technology solutions, vendors need to engage in new ways, adopting disciplines such as Agile and Lean. This session looked behind the scenes of a product innovation project at leading UK multi-play operator, TalkTalk. What were the benefits and the lessons learnt that can be applied to other projects?

**Davide Turi, Senior Product Manager, TalkTalk**



### ■ Please give us a brief overview of the TalkTalk Kids' Remote project and what inspired you to undertake it.

As almost half of our TV customers are families with kids, we wanted to ensure that they were getting the most out of TalkTalk and that we were fitting in with their busy lifestyles and giving parents control back.

The TalkTalk TV Kids' remote project began by doing a learning exercise with our customers. We invited parents to come to our offices and spend time with us face-to-face. We asked them about the problems and frustrations they face when their kids are watching TV; we learnt a lot of things. For example, that they are concerned that kids may mess up a TV setting or watch inappropriate content when they

convince them to stop watching tend to resort to are alone in front of TV and that they struggle to when it's time to go to bed. We also realised that they tablets for their kids' entertainment, because they find them safer and easier to control.

It was just as important to us that children were part of the process as well. We partnered with a number of primary schools and met the kids face-to-face. We asked them about the things that annoy them when watching TV; the answers chimed with those that parents had voiced and we gained some fascinating insights.

Using all of the information gathered we devised the Kids' Remote, which is a first-of-its kind TV remote designed specifically for children. Designed to combat both parents' and children's frustrations with standard TV remotes, the TalkTalk Kids' Remote was specially designed to allow little hands to easily find their favourite programmes within a safe and secure TV environment. The bespoke design of the remote comes complete with omni-directional infrared, meaning the remote works whatever direction it's pointed in.

### ■ What advantages did you gain from your lean, agile development process?

I think that the main learning from the development process was that involving customers, parents and children alike in the process, from conception to testing, was integral to ensuring that we created something that people actually need and would use.





We kept testing and changing details of the proposition until we got validation from kids and parents. Because we were getting direct feedback the entire learning exercise took just a few weeks.

Moreover, we have been extremely efficient with our investment into the project. When working on discovering the correct shape and functionalities of the remote, for example, we presented mock-ups made of foam and paper to kids instead of fully working prototypes. This allowed us to reduce the upfront investment until we had market validation. Moving forward, we will definitely continue to involve the audiences that will benefit from our products and services, while we test our propositions in an efficient and cost-effective way.

■ **What did you learn? Would you do everything the same way again?**

I think that the most important learning was that being able to adapt and evolve in response to direct feedback from our customers was of paramount importance to the success of the project. The entire project went through a continual process of testing, measuring and learning. The results speak for themselves; there has been an increase in customer engagement in terms of more Video On Demand kids' content being played and the large majority of customers who used the remote are very likely to recommend us to family and friends. We will look to work in this way on upcoming developments.

■ **This was a relatively contained project. Would the same methodology scale for say a facility-wide project?**

In my opinion, focusing on customer needs at all times, and aligning all internal and external resources to address them were the success of this project. Customers are at the heart of everything we do, so involving them from the conceptual stage to identify frustrations they may face, will be something we continue to do moving forwards.

■ **Finally, what were your top takeaways from other sessions at the IABM conference?**

During the conference it became clear to me that the TV industry as we know it is at a turning point. As traditional operators and business models are facing fierce competition, we need to learn how to innovate and to be quick to respond to the changes in viewers' habits and to the evolution of their needs.

Lean and agile methodologies were evident in being able to help innovate effectively. An obsessive customer-centricity, the application of a scientific methodology in new product development and careful budget management were also key to the successful creation of innovative products that satisfy customer needs.







VR in the mainstream will probably happen, but give it to 2020



## Beyond broadcast: finding new markets

Many vendors are finding exciting business opportunities by looking beyond the traditional broadcast market in education, events and live sports – plus the huge growth of video use across corporate marketing. A panel of entrepreneurs who have built their business beyond broadcast let the audience into the secrets of success.

**Muki Kulkan, Founder and MD,  
Muki International**



- Many commentators predict that VR will not become a mainstream medium in broadcast and media.

**You seem to have a different opinion; what's fuelling your outlook?**

Mainstream is crazy word to use, but the same conversations were happening when mobile phones were first coming out in the 90s, and when would these strange pieces of klunky plastic that may or may not hold content become mainstream? Back then we knew one day that people would be watching videos on their phones, but it was just a matter of time for devices to become more robust (and smaller, and affordable!) so as to appeal to the mass market. So in my opinion, the status of VR in

the broadcast and media as a new format is in the brick-phone phase, and while our peers in this industry are taking chances with various ways to use VR, it's exciting to us creators who have new toys and vast opportunities to experiment with. Also, over the last 18 months or so, I've seen at least 90 or more VR-style production studios and agencies pop up, all over the world. So there is mass appeal with investors and the industry, and subsequently fans, who are all rooting for it. VR in the mainstream will probably happen, but give it to 2020. Give me a call then and if I'm wrong, I'll buy you a beer.

- Most people are already 100% busy dealing with the market they are already in. How do you efficiently identify which new/different market areas have potential?

Great question! Professionally, I look at how a new market can potentially impact fans in new and different ways. Can it bring a fresh way to watch or absorb content, or create a new experience? Does it have a UX that users can work quickly and easily? Can that market show it will have a bit of longevity, so it's worth taking a punt with? For me as an independent, I have the luxury of doing tons of my own R&D and talking to everyone, so I can test, try,





and evaluate lots of different markets, then use my best judgement to new or existing clients as to which would be their potential best bets.

■ **Breaking into a new market with a raft of established players is difficult. Any tips for streamlining the process?**

Attending conferences like the IABM will help! I actually mean this seriously, because here you have a raft of fantastic vendors and big-name players to mingle with, and the best thing to do is talk to people, learn and see where you can have that potential in a new market.

■ **You said UGC is beginning to take over on social platforms. How would you monetize this opportunity?**

Monetizing UGC has been happening for many, many years (cue Google/YouTube/Ads, and double cue platforms like LadBible/UniLad), and we've seen these types of platforms rake in the money off advertising, and technically, Facebook is a platform that also makes money around a user's generated content – over 2 billion global users in fact. (Aside from news of Zuckerberg's hack-summits, have you ever seen a Facebook-produced video?) But other ways to capitalise on UGC can be via subscription services (brands/fan-clubs), in-app payments (cue Kim Kardashian's app, harnessing her as the no-shame queen of UGC!), just to name a few examples.

■ **Finally, what were your top takeaways from other sessions at the IABM conference?**

Super friendly people and insightful chats (my highlight was René Carayol, a true inspiration, and his book is fab too!), and it was nice to see how

various vendors from various sectors are all starting to integrate and work together.

**Nicki Fisher, Sales Director, EMEA, Clear-Com**



■ **Most people are already 100% busy dealing with the market they are already in. How do you efficiently identify which new/different market areas have potential?**

This has to be built into your end of year planning activities. When formulating a plan for addressing different market areas, it is important to consider marketing activities, sales channels and product development requirements tactically for the next 12 months in addition to strategic considerations for success in the next 1-3 years.

■ **Breaking into a new market with a raft of established players is difficult. Any tips for streamlining the process?**

Building cross functional teams across Sales, Support, Marketing and Product Development disciplines are critical to ensure success. Make these addressable markets key personal development objectives to ensure that you put the right level of focus on them.

■ **Finally, what were your top takeaways from other sessions at the IABM conference?**

The diversity of the sessions across the two days of the IABM conference provided plenty of food for thought and opportunity for engagement within the broadcast industry alone for many suppliers from IP to AI. Consideration of suppliers' value propositions are fundamental to ensuring well-constructed, technology led, business development opportunities with the broadcasters of today and tomorrow.





## Standards – who needs them?

We have heard about interoperability, microservices and vendors collaborating, so what does this mean for standards? Are industry standards such as SMPTE ST 2110 more important than ever – or an anachronism in an age driven by IT? What about other emerging standards such as NDI? Two leading systems integrators, who have delivered IP projects in the wild, debated the importance of standards in the transition to IP, and asked whether they are always answering the right question.

**Daf Rees, Deputy Director of Operations, Arena TV**



### ■ Are standards necessary? Please briefly explain your answer.

The move to media over IP infrastructure and workflows represents a paradigm shift from the existing linear co-axial model, and in that context, standards are crucial to guarantee interoperability between vendor-diverse equipment and to give system architects the confidence that the system will work as designed. This is the key to encouraging the adoption and deployment of the technology.

### ■ How could the standardization process be accelerated – or should we be expending our efforts elsewhere?

At publication, a standard should be robust and unambiguous, yet careful not to impose a workflow. It's a difficult balancing act which, understandably, takes time to reconcile. That said, it's important the standards bodies work to keep up with the appetite for the technology.

### ■ What were your top takeaways from other sessions at the IABM conference?

It's interesting to see how AI is taking a hold on the industry, with sessions citing applications as diverse as automatically logging live material and personalised content curation and delivery. There seem to be many areas within my sphere of the industry – live content creation, where AI applications could be deployed to make the production process more flexible and efficient. 'The cloud' was also a regular refrain from the stage, with low latency connectivity and cloud based apps

and processes making inroads into every aspect of the acquisition, contribution, post and distribution elements of production.

**Marc Risby, CTO, Boxer Systems**



### ■ Are standards necessary? Please briefly explain your answer.

The world needs standards, interoperability is essential. Defined standards also mean it's possible to make products to convert between standards, so we can make decisions based on what works in a given situation and still make oneself compatible.

### ■ How could the standardization process be accelerated – or should we be expending our efforts elsewhere?

This is hard! If you ask 27 different people for their input on a standard, you'll get a tonne of answers and a lot of debate. My feeling is that the industry as a whole has to understand that adapting to our customers' ever-changing needs means that we need to reach consensus quicker and move forward. If necessary, we may need to look at amending and updating standards as use cases change in a way we haven't in the past.

### ■ What were your top takeaways from other sessions at the IABM conference?

That our customers want more meaningful partnerships not blind pitches of new products, that we need more young blood in the industry and that John Ives plays a mean guitar!





From the Buyer's Panel – Sales people do not listen, buyers hate to be sold to

## Keynote: Selling better: it's about benefits, not specs

Sandler UK has been highly successful in helping companies set out a framework and methodology for successfully selling into B2B markets – indeed, it is an IABM training partner. Shaun Thomson shared some of the secrets of sales success with the audience in his keynote presentation.

**Shaun Thomson,**  
**CEO, Sandler UK**



■ It's said that the maximum number of things a normal person can remember and act on from any one session is just three. So what are your top three tips to materially improve a company's sales process – and results?

- 1) Know who you are aiming for – Define your Ideal Prospect. It is much easier to capture new business if you know who you are aiming it at and where they hang out, what they read, what their issues are etc.

- 2) Have a system for sales... it would be great if it were Sandler, but having any system is better than no system. A system should give you predictable results and allow you to improve one component at a time.
- 3) Equal Business Stature particularly when qualifying, because that allows you to (nicely) say 'no' to some folks and stop chasing them, and it also raises your stature with prospects/clients to Trusted Advisor.

■ **What were your top takeaways from other sessions at the IABM conference?**

Alexander Low's piece on Social Selling, particularly LinkedIn. By becoming a thought leader and continuously drip-feeding info so when someone has a project moving forward, they see you as the 'go to' person. From the Buyer's Panel – Sales people do not listen, buyers hate to be sold to.







In 2016 Endemol Shine Group produced more than 800 productions, in 76 territories airing on 295 channels around the world

# In reality, the future's artificial



**Tony Emerson**  
*Managing Director, Worldwide Media and Cable, Microsoft*



**Lisa Perrin**  
*CEO, Creative Networks, Endemol Shine Group*

## Tony Emerson of Microsoft discusses how AI is transforming reality TV content with Lisa Perrin, Endemol Shine Group's CEO of Creative Networks.

Tony Emerson, Managing Director, Worldwide Media and Cable at Microsoft, interviewed Lisa Perrin, Endemol Shine Group's CEO of Creative Networks to give the audience at the IABM Annual International Business Conference a fascinating insight into how Endemol Shine Group are beginning to deploy AI as part of the creative production process.

Endemol Shine Group has an outstanding portfolio of global hit scripted and non-scripted programs including: MasterChef, Big Brother, Deal or No Deal, The Money Drop, Your Face Sounds Familiar, The Brain, Hunted and The Island to name just a few of its non-scripted shows. Its drama portfolio is similarly international and diverse, with acclaimed worldwide hits such as Humans, Bron, Peaky Blinders, Black Mirror and Broadchurch. In 2016 Endemol Shine Group produced more than 800 productions, in 76 territories airing on 295 channels around the world.

"Endemol Shine is a hotbed of creativity," said Perrin, setting the scene. "We're obsessed with both the scripted and non-scripted pipeline; formats that can be adopted all over the world really are our lifeblood. The MasterChef and Big Brother type of formats underpin our business. There's no doubt we're living in a 'drama bubble' on TV at the moment – there's far too much drama to be able to watch it all. Also, the biggest entertainment formats are coming to the end of their lives and new entertainment formats are being launched, which is great for us."

"We talk about AI and it's not really about automation – it's really new insights and new ways of looking at

content – expanding the value of what we do and giving us insights rather than just making it cheaper or faster," said Emerson.

"For me, as a former producer and executive producer of programs, AI and the cloud is going to revolutionize television. In terms of creativity and we can show, what we can offer, the stories we can unlock – and the journey we've started on with Microsoft on Big Brother has really proved to us what an amazing advantage it is. It's not about cost-cutting or optimization, it's about being able to tell great stories in a totally different way," said Perrin.

"With Big Brother now 18 years old, we were looking at it as a kind of heritage – it's one of our juggernaut brands – we were looking to reinvent it and what we could bring to our customers, the broadcasters, to make it fresh and new, and rebrand it. We were still making it the same way we did 18 years ago – and we started working with Microsoft in Holland on how we could really interrupt the workflow and make the show look better and actually overlay cognitive services via the cloud. We tested it in Spain earlier this year and it really worked. Next year we'll be rolling it out in other Big Brothers around the world – it's something we're really excited about," Perrin explained.

"At the end of every day you already have facial recognition, automatically generated transcripts, volume and heartbeats..." said Emerson. Perrin explained how Big Brother is currently made. "You have 16-20 people locked in a house for up to five weeks, being filmed 24/7. You have a gallery which is 24/7 with at least five to ten people in there looking at the camera runs and the stories coming out, a team of loggers, with logs – often on paper – delivered to the edit suite and there's a pyramid of edits with up to 30 running at any one time.





It's a big old beast – and that's just the daily show in the UK. You also have digital shows, the live bits, so it's a very big program.

"What we've done is put new automated 4K Panasonic cameras in the house so we don't have to over-light and we can get rid of the camera runs. The cameras feed into a really neat gallery device on which you can click on each camera and decide where you go. We've automated the sound and all the logging is via the cloud – logged automatically; the facial recognition goes straight into the edit. The other great advantage is that we can have a house anywhere in the world and we can edit wherever we like. For example, the Big Brother house could be in Australia, and the editing in London. And we can roll this workflow out into lots of other formats. For instance, we make The Island in Panama, which is expensive – we could now shoot in Panama but edit back in London.

"Cognitive services can be used to automatically identify – for example – attraction, by picking up a raised heartbeat via a Fitbit. In addition, we're developing an App with Microsoft that offers fans the ability to follow just one character. It's about giving super-fans the ability to interact with characters and storylines in a way they've never been able to before. It's absolutely impossible to engage a teenager with linear broadcasting – apart from with sport. We think this new App will really engage that key 16-24-year-old age group in the same way they interact with social media," said Perrin.

"Will automatic translation be helpful to you?", Emerson inquired. "There are definitely advantages on the drama side from being able to instantly translate in the cloud," Perrin responded.

Emerson enquired whether using AI would also shorten turnaround times. For Perrin, cutting the load of manually logging hours of clips – particularly footage recorded overnight, would be a major gain. "We believe cloud machines can pick up sensitively what activity is going on in the night – whispering and indeed any kind of activity – and take that activity and deliver it into the edit. So instead of an edit producer turning up in the morning and thinking 'I'm going to have to plough through 10 tapes to find maybe just one little bit of activity', the computer has already delivered that into the edit suite ready to be edited. In terms of timescales, it is

really going to make things an awful lot easier," Perrin said.

"Security is something we've all talked about and there are things we don't necessarily want viewers to see – and nor do they! So security and data management is really important and we're confident. It feels better than where it is at the moment – in random edit suites. With the cloud it's in one place and we know where it is and it's secure. It's a much better management system for the assets. We're better off having it all in one place in the cloud – it's much more secure."

"Will AI find its way into other Endemol Shine productions?" Emerson enquired. "We use Big Brother as our testbed because it's a really hard show to make – we show it around other formats and they really see the possibilities. They're incredibly excited about where this could take their program making. AI is also great for looking at scripts or finding talent – Netflix does this, which probably explains why they are up for 92 Emmies! We're interested in testing this with our scripting companies. For really production intensive formats this new approach will enable us to roll it out in a far better and cheaper way – but it looks better too and it's a better experience for the people in the documentary and the viewers too. We're also looking at using consumer feedback to drive projects; for example, we could allow their feedback to guide us to lock the fridge on Big Brother so the character can't eat that day! Less so on scripted – we work with eminent writers and to take away their creative licence is a big step to take – we're not there yet."

"Will you grow the number of productions by employing AI?", Emerson asked. Perrin sees its major benefit in quality rather than quantity for Endemol Shine: "We already have over 4000 unique formats in our catalog. Viewers want to see great looking content – so we're not necessarily looking at that much more volume but rather, raising our quality still further by using AI."

Is there a worry about AI taking away jobs? "No. There is nothing more soul destroying than logging hours of Big Brother, so repurposing those jobs into something more interesting would make everyone much happier," Perrin concluded.



Storytelling is an essential aspect of human existence – it's what sets us apart from all other species on the planet

## Closing Keynote: From strength to strength

**George Bevir**, *Editor, IBC365*

IBC365 editor, George Bevir, was given the daunting task of providing an overview of the entire conference in his closing keynote. He picked seven themes:

1. Predicting the future is impossible, but we can reduce the risk by tapping into the data.
2. Collaboration is essential. By working together with end-users, vendors will gain the insights they need; solve problems by forging partnerships.
3. The IP journey continues. The IP Showcase at IBC did a good job – but IP doesn't immediately cut costs or create revenue. So what problem does it promise to solve? IP promises distributed architectures and increased innovation, but vendors need to help broadcast and media companies understand the benefits.
4. Cyber security is a real concern – cyber-crime is a ubiquitous and increasing threat. Broadcasters and media companies are asking more and more questions of vendors and will gravitate towards those that answer them.
5. The AI revolution will help with end-users' top priority – to make them more efficient. AI and the



cloud will revolutionize TV – as the Endemol Shine Group's work on Big Brother is showing us.

6. Be quick, nimble and agile. Launch new services quickly – act as swiftly as your clients' needs are changing. Build once – deploy many. Use agile development to gain better customer insights.
7. Opportunity does exist. The wave of consolidation in large media organizations means there is a shrinking pool of key customers, while FAANG (Facebook, Apple, Amazon, Netflix, Google) mega-companies are now vying to get into the industry with enticing content. Storytelling is an essential aspect of human existence – it's what sets us apart from all other species on the planet. The way we do it will continue to evolve but storytelling will always be at the heart of humanity.





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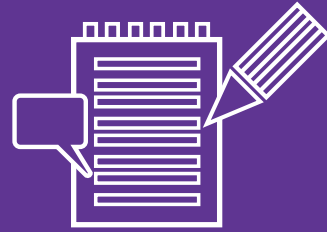
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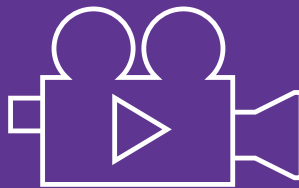
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# IABM BUSINESS INTELLIGENCE QUARTERLY DIGEST

DECEMBER 2017



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You can find more information regarding IABM Business Intelligence  
at [www.theiabm.org/business-intelligence](http://www.theiabm.org/business-intelligence)

# THE QUARTERLY DIGEST

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The IABM Business Intelligence Quarterly Digest provides IABM members with a varied range of business information about the broadcast and media industry and the wider global economy in a “digestible” way. The purpose of this report is to enable member companies to keep up with the latest developments in our industry by presenting otherwise scattered information in an orderly and relevant manner.

### Report Contents and Structure

The analysis is undertaken by our Lead Research Analyst, Lorenzo Zanni, and Research Analyst, Abirah Aziz. We publish the latest news and research findings across a variety of topics, including:

- Current Global Business Environment
- The Media Business
- Regional Focus on an Regional Market

This edition of the MI Digest will include a Regional Focus on the Middle East and Africa.



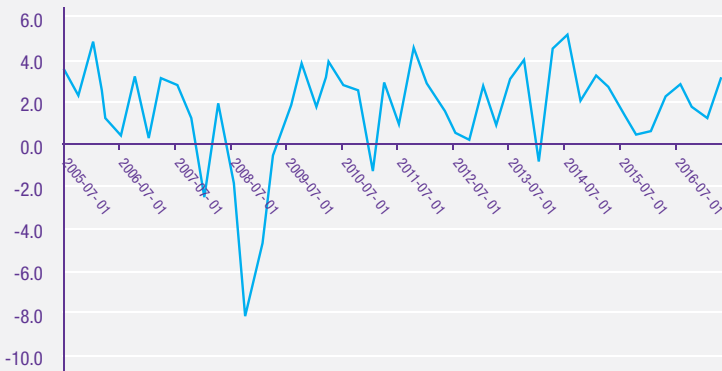


# EXECUTIVE SUMMARY OF THE INDUSTRY

## Q4 2017: Consumer spending and business investments on the rise

- Recent figures show that economic growth is being experienced by 75% of the global economy
- The IMF has raised its forecast for 2017 GDP growth from 3.5% in April to 3.6% in October
- In the US, the Trump administration has released information on the tax plan, which sees corporate tax cut from 35% to 20% – many businesses have been encouraged by this with business investment on the rise
- UK inflation reached a five-year high at 3% in September due to depreciation of the Pound – the Bank of England raised interest rates, for the first time in a decade, to 0.5%
- China achieved annual growth of 6.8% in the third quarter, however the reliance on debt-fueled investment causes concerns for long-term growth

Global growth percent change (2005–2017)



Source: Federal Economic Reserve

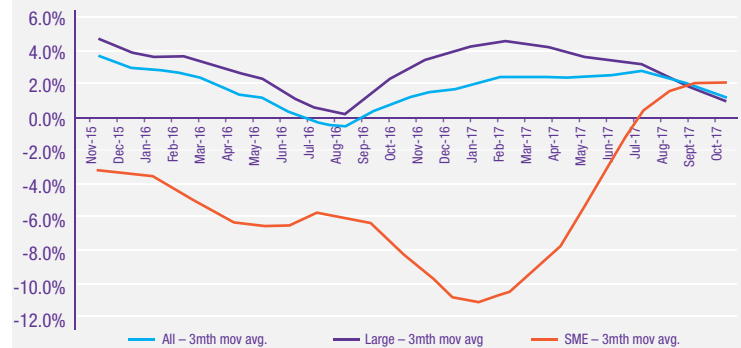
## Disney goes Direct-to-Consumer

- Disney announced in August 2017 that it will remove its content from Netflix in 2019, which will be included in a new Disney OTT offering to be launched in the same year
- An ESPN-branded multi-sport video streaming service will be launched in 2018



- The value of live sports, which are often considered to be the last stronghold of linear (scheduled) television against the rise of on-demand, is significantly increasing as traditional media players battle with technology companies to purchase the rights
- Facebook launched the Watch tab in the US in September 2017. This includes original programming produced by Facebook's partners and lets users subscribe to their favorite shows

Year-on-Year Market Sales Change, last 24 months, by size



Source: IABM

## Supply Trends

- Data from the latest IABM Industry Index showed that sales growth remains at positive levels but has dropped from 2.6% in June to 1.1% in October
- Profit growth has dropped again from figures reported in the previous report, from -22.3% in June to -23.7% in October
- The growth gap between large companies and SMEs has reversed from 5.5% in June to -1.2% in October



## The Future is Artificial

- At the IBC 2017 tradeshow, artificial intelligence was for the first time one of the main themes, both at the exhibition and in the conference sessions
- Only 8% of media technology buyers said they had adopted it before the IBC 2017 tradeshow
- However, the low percentage of companies that have adopted AI masks the rapid increase in adoption of the technology
- The primary driver of adoption of AI technology is the opportunity to automate routine workflows that are manually executed





# **GLOBAL BUSINESS ENVIRONMENT**

IABM – December 2017



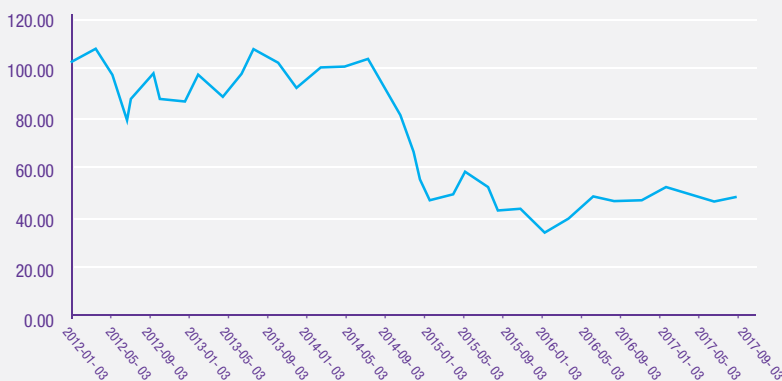
# GLOBAL BUSINESS ENVIRONMENT

## Overview

The majority of the global economy is experiencing growth. IMF projections of world output growth in 2017 have increased from 3.5% forecast in April to 3.6% as of October. The IMF forecasts 2.2% growth in advanced economies in 2017, an increase from 2% in April. Similarly, for developing and emerging economies, the IMF forecast increased from 6.6% to 6.8% for 2017. This positive outlook is spurred by increased consumer spending and business investments as confidence increases, however growth in some developed nations remains weak in the medium-term due to low inflation and slow wage growth. Commodity prices, especially oil, have made little progress in gaining momentum globally, impacting oil-exporting nations. The IMF has warned nations not to get complacent with recent growth figures, as policy uncertainty and political tensions could threaten progress in certain regions making sustainability difficult.

Chart 1 shows that oil prices have declined since 2014 and have not been able to recover to their previous level, staying around the \$50 mark. Analysts have forecast that oil prices will remain around the US \$50/US \$60 mark with only modest increases in the foreseeable future. The OPEC agreement to cut production has restricted growth in the oil-exporting Gulf states. This agreement is due to end in March 2018 – however, many oil-exporting nations support an extension, including Russia. Saudi Arabia has also made statements that it is willing to agree to an extension, however this is also dependent on US oil production.

Chart 1: Crude Oil Prices (\$), WTI (2012–2017)



Source: Federal Economic Reserve Data

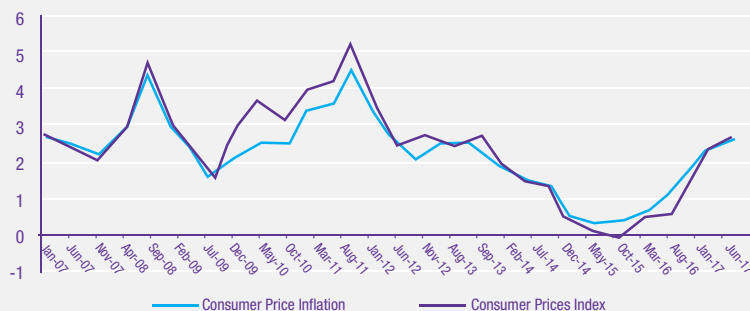
The US achieved an annualized rate of 3% growth in the third quarter, outperforming the prediction of 2.5%, despite the damage from hurricanes Harvey and Irma. This was largely due to steady spending from consumers and businesses. Consumer spending grew by 2.4% while non-residential fixed investments by businesses grew at 3.9%. The impact on GDP of the hurricanes is still being assessed, however the US labor department recorded a monthly fall in employment of 33,000 jobs in September – the first drop in seven years. Due to this being a hurricane-related anomaly, the US economy has still performed well with stock markets hitting record highs. The IMF has increased its 2017 growth forecast for the US, from 2.1% to 2.2%, primarily due to increased spending and investments. However, according to the IMF, policy delays due to lack of agreement between the White House and Congress will hinder the recent fast-paced growth that the US has been experiencing.

The Trump administration continues to push ahead with tax reforms to boost business growth and employment. The plan would see the corporate tax rate cut from 35% to 20% and allows a one-time repatriation on non-US earnings. For individuals, the seven existing income tax brackets have been reduced to three: 12%, 25% and 35%. The bill is estimated to be US \$15.1tn over a decade, however there is little information on how the tax cuts will be financed. Despite these challenges, some businesses in the US including AT&T and UPS, remain confident about the tax cut, expressing confidence in earnings and extra cash for future investments.

According to Eurostat, the UK experienced growth of 0.4% in the third quarter, an annualized rate of 1.5%, a slight increase from 0.3% in the second quarter. This growth was driven by the dominant UK service sector with manufacturing also improving in the third quarter – construction has declined for two consecutive quarters. Brexit negotiations continue as the March 2019 departure draws closer, however there has been little progress on vital issues such as trade agreements and migration.

# GLOBAL BUSINESS ENVIRONMENT

**Chart 2: Consumer Price Inflation, percent change over 12 months and Consumer Prices Index percent change (2007-2017)**



Source: Office for National Statistics

Inflation has increased, shown in Chart 2, with the Consumer Prices Index (CPI) hitting a five-year high at 3% in September following the slump of Sterling after the Brexit vote, dampening consumer spending. Mark Carney, Bank of England governor, predicts further increases to around 3.2%. Moreover, inflation has outpaced wage growth, which increased to 2.1% in September. Due to rising inflation, the decision was made to raise interest rates for the first time in a decade – from 0.25% to 0.5%. Mark Carney has said that the forecasts of 1.7% growth for the UK economy over the next few years would require “about two more interest rate increases over the next three years”.

Brexit has caused the UK economy to grow at a slower pace, increasing inflation and discouraging business investment, as the future remains uncertain. At the time of writing, Brexit negotiations are entering their sixth round. Brussels has given the UK an unofficial deadline of three weeks to offer an amount for the ‘divorce’ settlement bill. Following this, officials have said that progress can then be made on the transition deal proposed by the UK and other important issues.

The Eurozone has seen a good year so far with growth continuing into the third quarter at 0.6%, an annual rate of 2.5%. The European Central Bank (ECB) has increased the growth forecast for the Eurozone in 2017 to 2.2%, with unemployment at 8.9% in September – the lowest rate for nearly nine years. However, inflation remains below the 2% target at 1.4%. France contributed to this strong growth as household consumption and business investments increased, indicating an improvement in confidence – growth in the third quarter was 0.5%.

Germany raised its growth forecast to 2% for 2017. Spain also performed well in the third quarter at 0.8% – annual growth for 2017 is forecast at 3.1%. Political tensions in Catalonia – voting for independence from Spain – have done

little to diminish growth prospects, with predictions that Spain will be one of the best performers in the Eurozone. The ECB will continue to reduce its policy support as economic recovery continues with bond buying reducing from €60bn per month in 2017 to €30bn from 2018. Eastern Europe shows significant improvements in growth, with the IMF increasing the forecast for ‘emerging and developing Europe’ to 4.5% this year.

The IMF has increased growth forecasts for Asia-Pacific to 5.6% as the region continues to lead growth and global demand remains strong. This is also due to key export markets, Europe and the US, performing well. China grew at an annual rate of 6.8% in the third quarter, on target to meet 6.5% in 2017. The economy continues to rely on debt-funded investment, which creates long-term risks. However financial regulators have tightened policy this year.

Growth in India has been revised down by the IMF, from 7.2% to 6.7%, due to demonetization in 2016 and the introduction of new taxes. Japan continues to face challenges with debt, an aging population and low inflation. Despite these challenges, Japan’s forecast for 2017 has been increased by the IMF to 1.5% from 1.3%, due to the pickup in exports and stronger consumer spending. There have been initiatives from the government to get more women into the workforce to encourage dynamism and attract foreign investment.

Latin America continues to progress gradually, with Argentina, Brazil and Chile showing significant recovery. Economic activity in Colombia is slowing down while Venezuela is contracting for the fourth consecutive year and is at risk of hyperinflation. Mexico remains stable despite the uncertainty about future trade relations with the US.

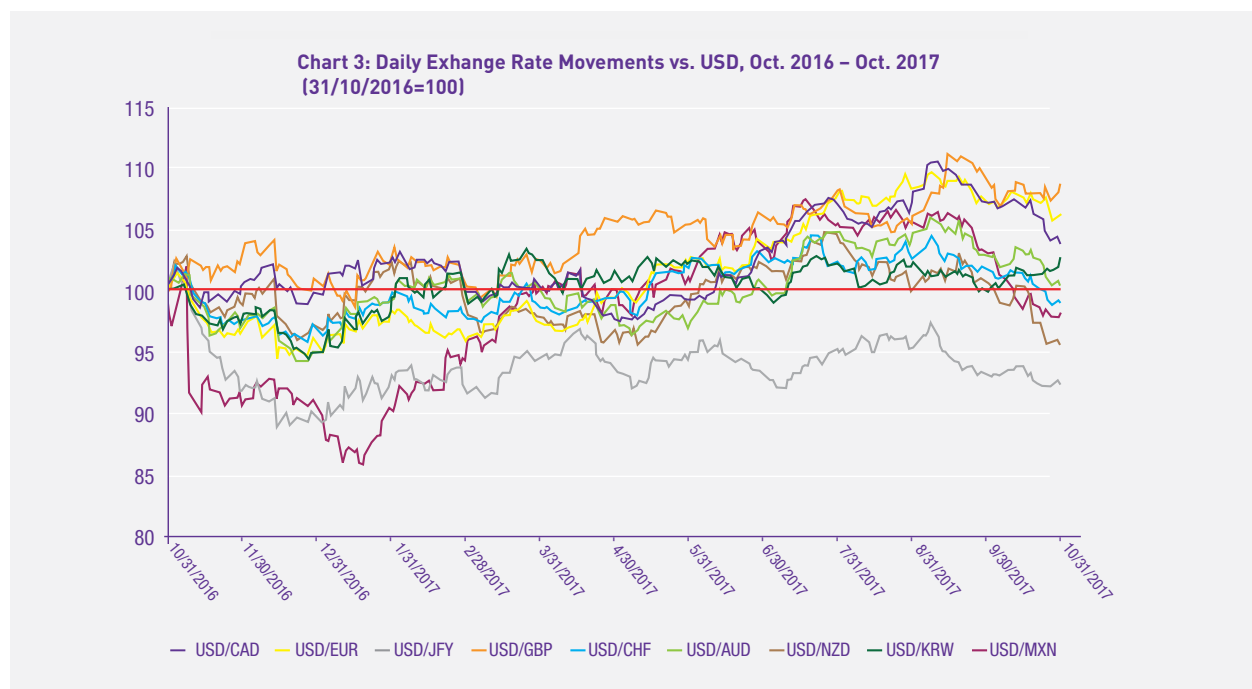
Commodity prices have contributed to growth, especially copper, however these prices remain volatile. Although domestic demand is picking up in a few nations, the region continues to face political and policy uncertainty. Russia achieved 2.5% annualized growth in the second quarter as the manufacturing and service sectors improved, signaling stronger demand.

# Exchange Rate Movements

**We report the latest swings in major economies' exchange rates and provide an outlook for their possible movements over the coming months. Exchange rates are highly unpredictable but it still is useful to plan and attempt a forecast based on current macroeconomic trends.**

The four major drivers of turbulence in foreign exchange markets have been:

- "Brexit" effect
- US fiscal policy
- Trends in commodity prices
- Monetary policy in Europe, US and Japan



Source: IABM analysis of PACIFIC Exchange Rate Service data

Chart 3 plots the major currency movements against the US Dollar during the last 12-month period. The data has a common starting point (31st October 2016) to allow comparisons of how different world currencies have moved against the US Dollar. The series that lie below the 100 line have depreciated against the US Dollar whereas the series that lie above have appreciated against it.

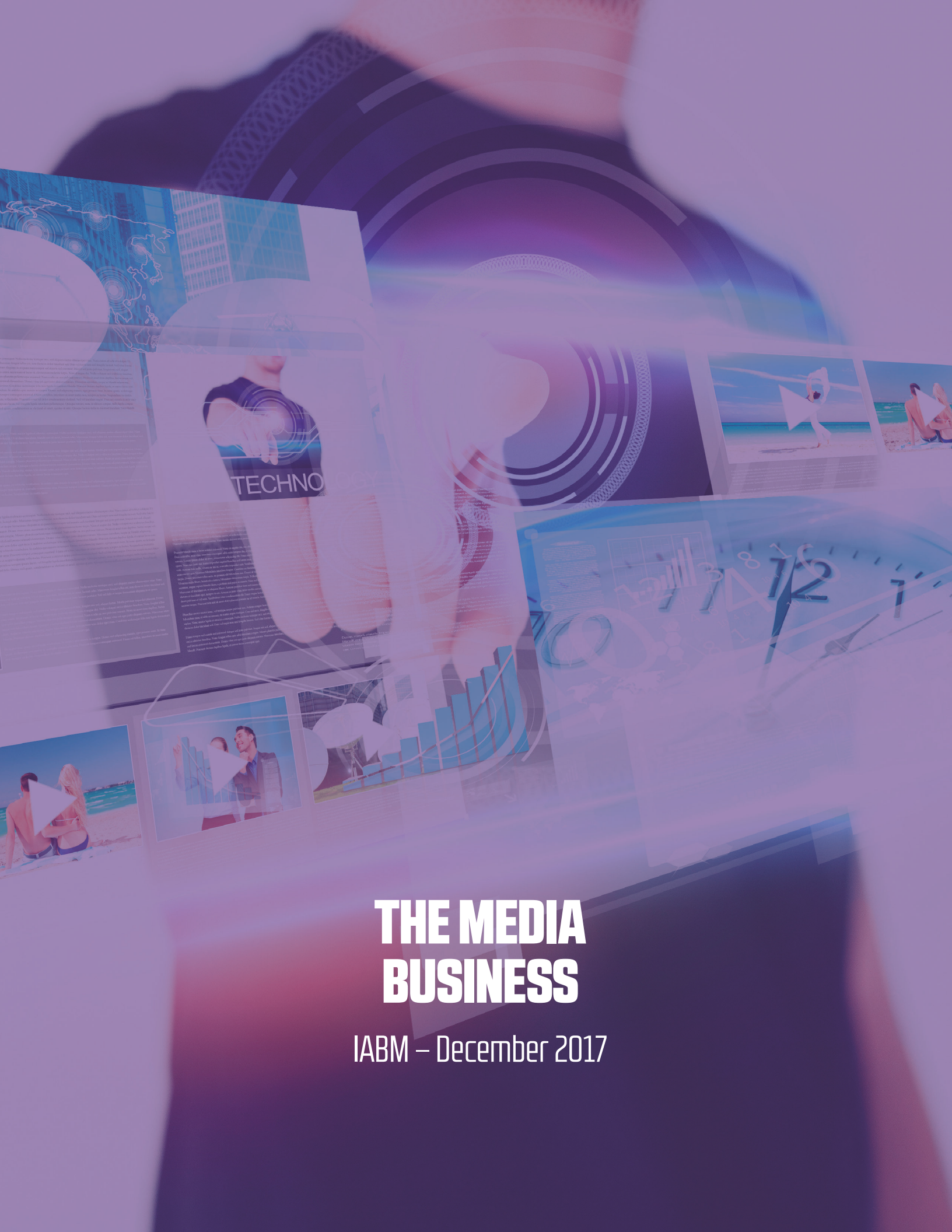
The Euro, British Pound and Canadian Dollar have remained relatively strong for the last quarter against the US Dollar while other currencies, including the Japanese Yen and Mexican Peso, have depreciated. The US Dollar has done well due to the better-than-expected economic growth, however policy uncertainty and delays present challenges for the currency.

The Euro has performed well throughout the year, seeing highs against the US Dollar and British Pound. Political stability and strong economic performance have contributed to the strength of the Euro. However, the Euro remains under pressure from low inflation across the Eurozone and the European Central Bank (ECB) stimulus program keeping interest rates low.

The British Pound is largely influenced by Brexit negotiations, with the decline starting after the vote to leave Europe in 2016. Following the Brexit vote, the British Pound fell to an all-time low, however the recent strength of the British Pound is due to the prospect of speedier Brexit negotiations. Bank of England monetary policy is also a significant determinant of movements of Sterling. The decision by the Bank of England to raise interest rates to 0.5% saw the British Pound decline, however this is not reflected in the chart as November data is not included. The future remains uncertain as Brexit negotiations continue and the real impact of increased interest rates is felt.

The Mexican Peso is considered to be highly sensitive to market sentiment and oil prices – Mexico is one of the largest oil exporters in the world. Moreover, its relationship with the US drives movement in the currency, especially since the election of President Trump. The Mexican Peso saw huge depreciation against the US Dollar following Trump's election, largely due to the uncertainties around NAFTA. As NAFTA talks proceed the Mexican Peso has gained momentum against the US Dollar, but remains volatile as the future trade relationship continues to be undecided.





# THE MEDIA BUSINESS

IABM – December 2017

# THE MEDIA BUSINESS

## Media Business Highlights

### Disney goes Direct-to-Consumer

Disney announced in August 2017 that it will remove its content from Netflix in 2019. It will instead be included in a new Disney OTT offering to be launched in the same year. An ESPN-branded multi-sport video streaming service will be launched in 2018.



Disney took a majority interest in BAMTech – a streaming technology service provider – in a \$1.58bn deal to support the launch of these offerings. Disney's decision follows consistent decline in ESPN subscribers – ESPN's profitability has also been falling in recent years due to the rising cost of sports content. Bob Iger (Disney's CEO) said of his company's decision:

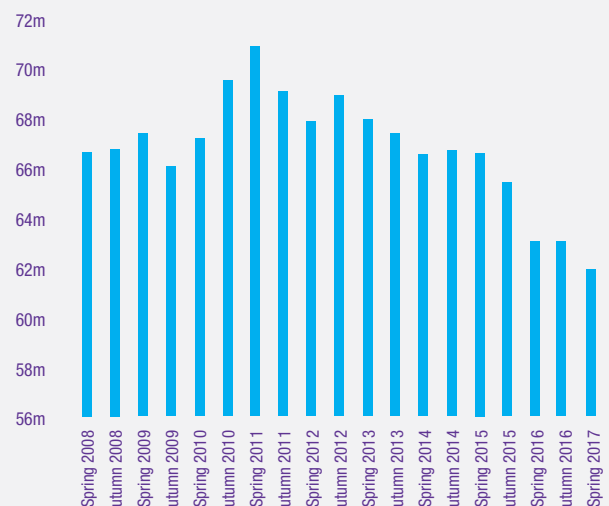
*"The media landscape is increasingly defined by direct relationships between content creators and consumers, and our control of BAMTech's full array of innovative technology will give us the power to forge those connections, along with the flexibility to quickly adapt to shifts in the market. This acquisition and the launch of our direct-to-consumer services mark an entirely new growth strategy for the company, one that takes advantage of the incredible opportunity that changing technology provides us to leverage the strength of our great brands."*

#### BAMTech Profile

BAMTech is a spin-out from MLBAM (MLB Advanced Media), MLB's digital media business. As video streaming growth surged, BAMTech was approved to become its own entity in August 2015. BAMTech powers the streaming offerings for MLB, HBO, NHL, WWE, and now, Disney's and ESPN's upcoming streaming services, BAMTech is now valued at \$3.75bn following Disney's latest investment.

This is a landmark decision with several implications for the media industry. ESPN is a flagship sports channel included in several Pay-TV packages so the decision to stream it direct-to-consumer will not go down well with Pay-TV operators – Iger hinted at this in his remarks, saying that Disney is allowed to go direct-to-consumer under current contractual obligations even if Pay-TV is not happy with it. As mentioned earlier, even though ESPN's performance has worsened in recent years, it remains Disney's cashcow – Disney's cable networks still deliver over 40% of its total profits. The decision to go direct-to-consumer is a risky one although Disney may monetize it through its new direct relationships with viewers, which will allow for more targeted advertising and, arguably, higher subscription fees compared to Pay-TV. The risk lies in the increasingly competitive nature of the streaming market vis-à-vis the limited consumer spend on entertainment services. The plethora of entertainment choices available to consumers may create an environment in which only a few players survive. Disney's major strength is its strong brand and content portfolio, which will still appeal to many despite the departure from Netflix. It will though take it time to build a subscription base large enough to match revenues accruing from existing Pay-TV deals – in case these are not included in the new model. From this perspective, Disney's shift prioritizes long-term strategy over short-term gains.

Chart 4: ESPN TV Subscribers



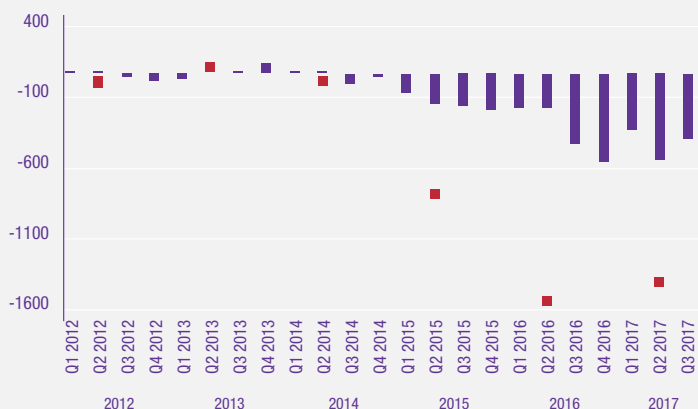
Source: Nielsen



# THE MEDIA BUSINESS

While Netflix's share price initially suffered from the effects of this move, it soon recovered its losses as investors priced in the larger portfolio of original content the company had built up over the last five years. The leading streaming company has though its own problems deriving from its content spending spree, having built a huge pile of debt that has ultimately had an effect on its free cash flow – Netflix borrowed US\$1.6bn through a bond sale in October to finance its increased content spending.

Chart 5: Netflix's Free Cash Flow (m), 2012-2017



Source: IABM analysis of YCharts' data (Purple columns → quarterly FCF; red boxes → yearly/partial total FCF)

## Sports Broadcasting: Inflationary Times

The value of live sports, which are often considered to be the last stronghold of linear (scheduled) television against the rise of on-demand, is significantly increasing. While traditional media players battle with technology companies to purchase the rights, some sports organizations and leagues are going direct-to-consumer. We comment on the latest news in sports broadcasting below:

### ■ Amazon purchases NFL and ATP sports rights and may look at widening its portfolio:

Amazon outbid Twitter, Facebook and Google for the NFL streaming rights (Thursday Night Football) in the US in April 2017, paying US\$50m – up from the US\$10m paid by Twitter last year. The e-commerce giant also outbid Sky for the ATP tour tennis rights in the UK in August 2017 paying £10m a year – up from the £8m a year paid by Sky for the previous deal. Amazon is trying to build up the amount of exclusive content available on Prime in order to attract more consumers and get them to spend more on goods – Prime customers generally spend more than non-Prime customers on the Amazon's e-commerce platform. Therefore, even though Amazon is not directly

charging consumers for the content, it is indirectly monetizing its investment by increasing both subscriptions and sales. According to Variety, it is spending about US\$4.5bn on content made available on Prime just this year. In this way, entertainment is used as bait to lure more consumers to sign up and spend on Prime. Amazon and Facebook are also said to be interested in bidding for the Premier League rights, which will be auctioned at the end of 2017. These rights will require a different kind of financial firepower, given that Sky and BT Sport paid a record £5.1bn for three seasons



in the period 2016-2019. Although sports is an important subscription driver for Pay-TV operators, Sky may not be willing to purchase the rights if the price rises too much – Premier League viewing has declined over the last year.

From an Amazon's perspective, it may not be worth spending too much money on rights that are monetizable only in a limited geographical area such as the UK – the same applies to Facebook as the two are both international technology platforms. BT Sport is therefore seen as the most likely winner in the bid – it has both the financial power and motivation to make a high bid – although the final outcome is highly uncertain. The only certainty is the inflation in Premier League rights, which are very likely to rise in value again.

### ■ IPL rights value skyrockets:

In the case of the IPL, technology platforms were outbid by a traditional media company. In fact, Murdoch's Star India outbid all rivals in the auction for the Indian Premier League, a major cricket competition. Star India's bid (US \$2.6bn) was more than double the cost of the previous deal. It is worth highlighting that Facebook made a bid of US \$600m for the rights. Similarly to the Premier League



rights, IPL rights have greatly risen in value with the new interest from technology platforms exacerbating their inflation. Although the IPL lasts only two months, the huge popularity of the competition makes it a valuable asset for both media and technology companies. This example further demonstrates how interest from cash-rich technology platforms can push up the prices of sports content. This is a challenge for Pay-TV operators and broadcasters going forward.



#### ■ EFL clubs go direct-to-consumer:

EFL clubs – i.e. lower-tier professional English football clubs – managed to strike a deal according to which they will be able to livestream the league's games on their websites. The deal with Sky – worth £120m a year for a total of £600m – will run for five seasons starting from 2019/2020. According to the deal, Sky will still have the exclusive rights to broadcast 150 matches from the English Football League's Championship, League One and League Two divisions. The EFL clubs will be able to livestream any league game played in the UK and Ireland – except Saturday afternoon games – that is not covered by Sky. Although the deal still values the EFL much lower than the PL, it is interesting to note that the EFL rights'



value has grown by 36% compared to the previous deal – this growth could have been higher if the rights were packaged together. The EFL is quite popular and attracts a large viewership despite its lower-tier status. As opposed to the PL, EFL viewing also grew in the past two years. EFL clubs will be able to go direct-to-consumer, taking advantage of the new arrangement to engage more with their fanbases. They will arguably spend more on media technology as a result of this too.

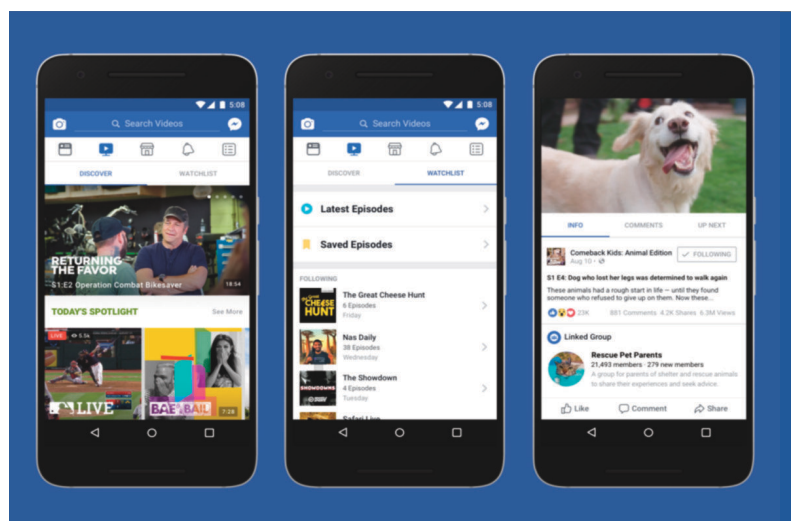
## Facebook launches Watch

Facebook launched the Watch tab in the US in September 2017. Watch includes original programming produced by Facebook's partners. Watch lets users subscribe to their favourite shows while giving them recommendations based on their viewing habits.

The business model supporting Watch is an advertising revenue share scheme between Facebook and its partners, with Facebook keeping 45% of ad revenue accruing from each video and show.

While Facebook is currently financing only a small share of the shows included in Watch, it plans to increase the amount of original programming it directly finances.

Shows on Watch include both live and non-live programming, including the live streaming of one MLB game a week, reality shows and mini-documentaries. The focus of



the programming currently available on the platform is short-form content – similar to what Snapchat is doing with its Discover channels.

Daniel Danker, Product Director at Facebook, said of Watch: *"We think Watch will be home to a wide range of shows, from reality to comedy to live sports and shows that bring*

# THE MEDIA BUSINESS

*communities together and tap into the things that make video on Facebook so unique"*

There are several reasons to believe that, with Watch, Facebook is challenging traditional television. As opposed to the Video tab launched in 2016, Facebook's new product also includes higher-quality original programming that could potentially attract viewers for longer times, exacerbating the decline in linear television viewing.

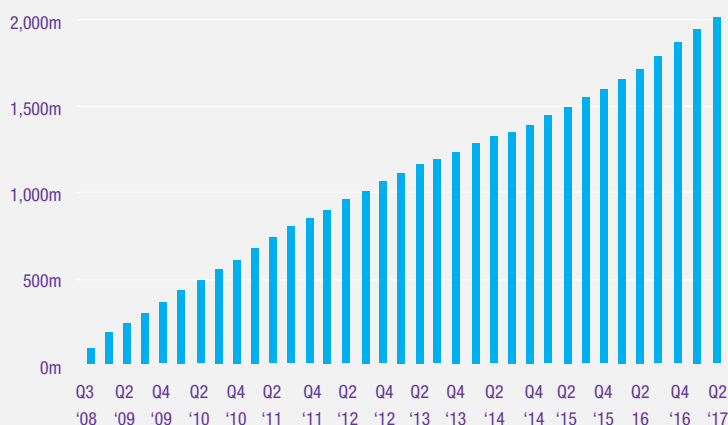
Even though the share of live sports programming available on the platform is limited at the moment, Facebook is undoubtedly interested in investing more in this too.

Facebook's Global Head of Strategic Partner Development – Sports Media, Rob Shaw, said of this:

*"Facebook is a phenomenal place to reach large audiences and we are now looking into and testing the possibility of actually broadcasting live sport content. It's going to be a huge learning curve for us, for broadcasters, media companies, the leagues, because it's not telephones, it's different. It's interactive, it's social, it's not a one-way conversation"*

As opposed to linear television, Facebook aims at building a stronger social experience around video viewing by providing a platform that enables users to share reactions and comments while watching. The challenge mounted by Facebook is strengthened by its huge user base – over 2bn monthly active users!

**Chart 7: Facebook's Users**



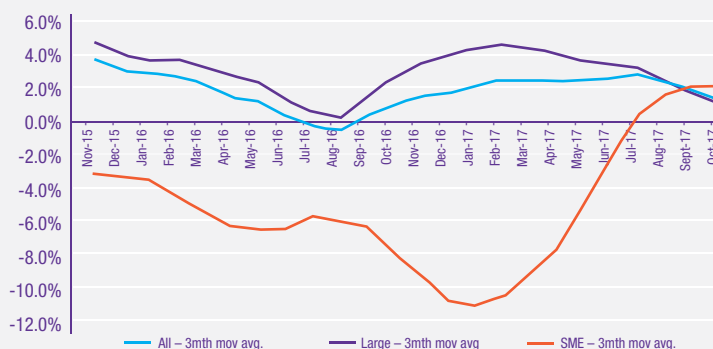
## Supply Trends

### Supply Financial Performance

#### IABM Industry Index

New data from the IABM Industry Index suggest a slowdown in the demand for broadcast and media technology products and services as well as a worsening of the decline in profits compared to our last published report.

**Chart 8: Year-on-Year Market Sales Change, last 24 months, by size**



Source: IABM

Sales growth remains at a positive level with the market sales growth figures now at 1.1%, a decline from 2.6% in June. Surprisingly, SME sales growth figures are above the market average and large companies, at 2.1% in October. This has led to the growth gap between large companies and SMEs to reverse from 5.5% in June to -1.2% in October. The chart above shows that large companies generally grow sales at a rate above the overall market average, however this has flattened in recent months with the market average at 1.1% in October and large companies falling to 0.9%.

Sales have experienced a slowdown in recent months, but remain positive. As the industry continues to change, companies are taking more time to make business investment decisions about new technologies and business models, which can be seen in the recent flattening of sales growth. The positive sales are mostly driven by the take-up of new technologies such as IP and the cloud as well as government-led transitions in specific geographies. Although emerging technology revenues still represent a small share of overall sales, their growth is significant. Some suppliers also indicate that investment is continuing to go into legacy infrastructure/equipment, particularly in emerging regions. The lack of any major cyclical events in 2017 has also impacted sales.

Profit growth has declined further from -22.3% in March to -23.7% in June, a significant worsening compared to recent months. Profits did recover slightly from June until August reaching -18.7% before declining to record low levels. In fact,

the -23.7% reported in October is the lowest profit growth rate since the end of 2013. Profit figures do not exhibit as significant a gap between large companies and SMEs as the one seen in sales. However, large companies still fare better than SMEs.

The worsening of profits is a consequence of increased investment, excessive industry fragmentation and technology commoditization. Media technology suppliers are investing heavily in both R&D and sales and marketing activities; however, this has started to slow down due to the squeeze on revenues. Suppliers in the media technology industry remain highly fragmented, while end-users continue to consolidate.

Therefore, media technology suppliers face challenges of limited resources to adapt to the changing market. Also, technology commoditization and competitive pressures continue to push selling prices down. Pricing pressures also contribute to undermining historical margins.

## Supply Business Trends

Below, we have included some relevant CEO comments at recent earnings calls:

*"Market demand for video infrastructure delivered through SaaS is accelerating. During Q2 2017, with respect to our OTT SaaS business, TCV grew 90% sequentially to 8% of total bookings, reducing near-term revenue and profitability but establishing a trajectory for stronger financial performance mid- to long-term. Additionally, recent material CableOS bookings and field deployment success bolster our confidence in the growth outlook for our Cable Edge segment."*

Patrick Harshman, CEO, Harmonic



*"In the individual market, we're seeing broad adoption of our cloud-enabled creative tools offering with successful pricing. This quarter we saw a surge in paid subscriptions and digital sales. This is driven by increased digital marketing efforts, the hundreds of thousands of aspiring artists that have taken advantage of our introductory first offerings which have been converting to paid sales in the artist community. A cloud-based LinkedIn meets Facebook type of offering which allows professionals to connect, create and share their creative profession is driving demand for our cloud-enabled creative tool. Our cloud alliance with Microsoft continues to press well and we remain very excited about the long-term possibilities of this relationship."*

Louis Hernandez Jr., CEO, Avid



*"Expansion of our digital platform revenue base, which, excluding NFL-related revenues, increased 16% in the second quarter compared to last year, is fueling improving growth. During the quarter, we renewed our current agreement with the UFC and launched a number of new OTT customers. The flexibility of the NeuLion Digital Platform enables us to work with our customers to ensure that their digital content is available to viewers faster,*

*with less operational complexity, and at lower costs than our competition. Our global reach provides a strong foundation for sustained business growth, customer success and long-term shareholder value."*

Roy Reichbach, CEO, NeuLion

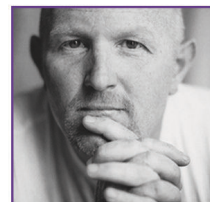


*"In the second quarter, we saw continued success with existing and new customers for IP video and cloud-based deployments, including the first sale of our new NitroX platform. We are continuing to generate green field customer opportunities globally for our end-to-end subscription solution, with yet another new multi-million dollar transaction in the quarter, which provides stronger support for revenue growth next year. Because large transactions are moving to a subscription model, we are narrowing and lowering our annual revenue guidance at this point, but improving bottom-line expectations that include achieving a return to profitability in the second half of the year."*

Ed Terino, CEO, SeaChange International



A full discussion of the results will be available to members on the IABM website.



## Need A New Face?

### We can help you find it

Interfacio provides an industry-expert search and selection service throughout Europe, USA and Asia for manufacturers and businesses within the broadcast and media technology sector. We source, select and place new talent in key commercial, management and engineering roles for our clients.

For a lot less than the cost of getting it wrong, we can help you get it right.

Our clients are based throughout Europe, the USA and Asia and work with us to attract and hire new sales, marketing, technical and management talent, from graduates through to senior business executives with relevant experience who are looking to progress or develop their careers within the industry.

International Sales Director - Broadcast Hardware and Software, France  
Director of Engineering - Broadcast Hardware Systems, USA

We are from the industry and would welcome the opportunity to speak with you to learn about your hiring challenges and discuss how we might be able to help you.



Find us on Facebook [facebook.com/interfacio](https://www.facebook.com/interfacio) or follow us @interfacio

Visit the website or contact us to arrange a confidential chat about your current situation or talent acquisition challenges.



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# THE MEDIA BUSINESS

## Media Technology Special: Artificial Intelligence

### What is Artificial Intelligence?

Artificial Intelligence (AI) is a branch of computer science that aims at creating intelligent technology capable of replicating human learning and problem solving skills.

Machine Learning (ML) and Deep Learning can both be considered as sub-sets of the wider AI field.

ML, an early application of AI, provides computer systems with the capability to learn from data without being programmed.

Deep Learning is a further development of ML enabling computer systems to imitate the workings of the human brain in problem-solving. The advent of Deep Learning can be traced back to the emergence of Artificial Neural Networks – a system of hardware and/or software modeled to mimic neurons' interconnections in the human brain. AI was once confined to science fiction. Its history has been characterized by “boom” and “bust” cycles similar to the workings of a modern economy. The “booms” have generally entailed a rise in expectations and optimism with regards to AI research while the “busts” have abruptly exposed the mismatch between these expectations and actual achievements.

### A Brief History of AI

#### 1950s

AI is officially born

#### 1960s

AI starts getting attention and funding

#### 1970s

First AI Winter with cut in funding

#### 1980s

Japanese and UK governments invest in AI;  
Second AI Winter

#### 1990s

AI starts being deployed in tech industry;  
IBM's Deep Blue beats world chess champion

#### 2000s onwards

IBM's Watson beats human participants  
in quiz show Jeopardy!;  
Internet revolution makes more data available;  
AI reaches funding peak in 2016

Some of the issues that prevented early AI experiments from achieving any progress in the past included the limited storage and processing power available.

In the 21st century, AI technology benefited from the exponential increase in processing power and storage capabilities as well as the rising amount of information made available by the internet revolution.

Today, AI looks capable of fulfilling the promises set in the past. Its influence in our everyday lives is already significant although its potential for the future is even greater. The next section looks at the influence AI is having in broadcast and media.

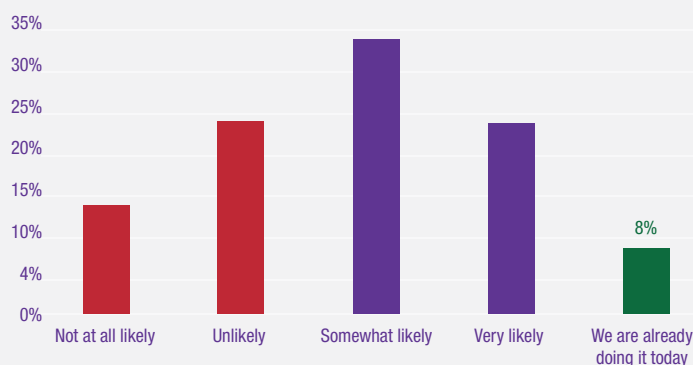
### Artificial Intelligence in Broadcast & Media

#### State of Adoption

At the IBC 2017 tradeshow, artificial intelligence was for the first time one of the main themes, both at the exhibition and in the conference sessions. Data is now considered one of the key elements (if not the most important) in media companies' future strategy.

However, according to IABM data, AI adoption in broadcast and media is still at an early stage, as shown by the chart below:

**Chart 9: AI Adoption Tracker: How likely is your organization to deploy some sort of Artificial Intelligence (AI) technology in the next 2-3 years? (IBC 2017)**



Source: IABM End-User Survey – IBC 2017

Only 8% of media technology buyers said they had adopted it before the IBC 2017 tradeshow. 36% said that they were unlikely to adopt it while 56% said that they were likely to do so in the next 2-3 years.

These results show that artificial intelligence is just at the start of its adoption curve. However, the low percentage of companies that have adopted AI masks the rapid increase in adoption of the technology. In fact, according to IABM data,

between April and September 2017, the percentage of media technology suppliers saying that they are unlikely to adopt AI dropped from 57% to 36%, indicating increasing awareness of the benefits of the technology – the percentage of respondents saying that they already deploy it also increased from 5% to 8%. In the same time span, “Big data analytics & AI” jumped from the #13 to the #10 position in the IABM technology priority index.

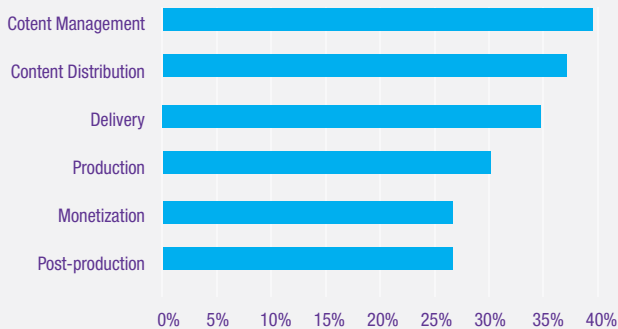
The primary driver of AI technology adoption is the opportunity to automate routine workflows that are manually executed. Netflix claims it saves about US \$1bn a year thanks to AI technology’s ability to automate workflows and reduce customer churn.

AI also guarantees increasing insights into audiences. These can be used for content monetization – e.g. advertising and content licensing – and customer retention. In fact, audience data can be transformed into effective customer retention campaigns or can be fed to recommendation/personalization algorithms to establish more personal relationships with viewers – this is key in a direct-to-consumer model.

### Artificial Intelligence Deployments in Broadcast & Media

According to IABM data, media technology buyers plan to apply AI mainly to content management and distribution workflows (see chart below), with a large share of respondents saying that they actually plan to use AI throughout the content supply-chain.

**Chart 10: In which of the following categories of broadcast and media workflows are you most likely to deploy AI?**



Source: IABM End-User Survey – IBC 2017

**Content management** is a natural area of application for AI technology. Although the unstructured nature of video and audio data makes it more difficult to classify, advances in techniques such as image, emotion and speech recognition have enabled media technology buyers to increasingly rely on AI tools to organize and search their content archives.

End-users find this of extreme strategic importance to build up an increasingly granular database of their content to compete with new players such as Netflix and Amazon, which have data at the heart of their strategies.



The process of tagging content is very manual and expensive, so it is a no-brainer to replace it with AI technology. By increasing the level of detail of the metadata, search on content management systems becomes more precise, thus boosting monetization opportunities – e.g. content performance indicators can be leveraged in advertising sales.

According to SVG, NASCAR Productions owns 500,000 hours of content and 3 million assets with only 9.5 million tags. Chris Witmayer, director, broadcast, production and new media technology at NASCAR Productions, said of this issue:

*“Although we have an entire archive that goes back to the 1930s, we can’t actually find anything efficiently. If you can’t find anything, you can’t sell it, and you can’t make money. So this [AI] is big for us.”*

The level of metadata richness is then also correlated with the number of opportunities to monetize content, in both commercial and licensing settings – again, content performance indicators can be used to justify the sale of a certain type of content to broadcasters.

This view on data creation as a money-making activity is key to understanding the importance that buyers give to AI in content management.

**Content distribution** is another hot area of application with end-users – the second most important according to our respondents.

Algorithms can be deployed to automate and optimize the network efficiency management of a Pay-TV operator, alleviate bandwidth issues in streaming and deliver increasingly personalized experiences to viewers.

Moreover, AI can be used to automate the delivery of content to different platforms, such as social media outlets, in order to streamline workflows – the automating nature of the technology is a very important driver of adoption for broadcasters struggling to reach as many devices and platforms as possible.

# THE MEDIA BUSINESS

The company at the cutting-edge of AI used for distribution is Netflix, which uses AI not only to suggest better content depending on viewing preferences but also to optimize video compression and delivery.

While **production and post-production** were lower on the list, AI has the potential to automate parts of the content creation and editing process as well. Although these are creative workflows, they are also made up of routine tasks that could be automated to liberate resources for worthier creative purposes. For example, an editor can save hours of his/her time if given a machine-edited video, while preserving control over the creative settings.

Despite the potential of AI technology in both production and post, products and solutions available in the market are still too immature for widespread adoption.

A summary of AI benefits by workflow area of application is given below:

Workflow Area		
Content Production & Post-Production	Content Management & Monetization	Content Distribution & Delivery
Saves time and resources by automating routine tasks such as highlights creation in sports production	Saves time and resources by automating routine tasks such as content tagging and speech-to-text	Saves time and resources by automating routine tasks in content distribution and monitoring
Enables media technology buyers to cover second-tier events and tap an additional revenue source	Enables media technology buyers to better search their existing catalogs through techniques such as image recognition	Enables media technology buyers to optimize distribution of high quality content to different devices and platforms
Enables media technology buyers to better track both production and post-production workflows while generating metadata	Enables media technology buyers to better track both production and post-production workflows while generating metadata usable throughout	Enables media technology buyers to increase subscription growth and customer retention by delivering a more personalized experience to viewers



## IABM MEDIA TECHNOLOGY TRENDS REPORT

The information contained in this Media Technology Special is derived from our newly published Media Tech Trends reports, which are available on the IABM website – the first Media Tech Trends report focuses on Artificial Intelligence.

The full report on AI contains a discussion on the state of adoption of this emerging technology in broadcast and media as well as a detailed analysis of significant customer deployments by workflow area of application. We also include a discussion on the adoption of AI in another vertical.



This should provide member companies more tools to better address the challenges lying ahead, from new product development to marketing strategy. In an ever-changing industry such as media technology, it is increasingly important for suppliers to keep track of emerging technologies' development and their use cases, both in media and in other verticals.

The table of contents for the full report is provided below:

### What is Artificial Intelligence?

A Definition of Artificial Intelligence

A Brief History of Artificial Intelligence

### Artificial Intelligence in Broadcast & Media

State of Adoption

Artificial Intelligence Deployments in Broadcast & Media

Content Production & Post-Production

Content Management & Monetization

Content Distribution & Delivery

### Lessons from Other Verticals

How Artificial Intelligence is being used in E-Commerce

### Appendix



BROADCAST  
THE ——— BRIDGE

# ALWAYS ON...



**The Network.** Have you joined *The Network* yet?

[thebroadcastbridge.com](http://thebroadcastbridge.com)



A photograph of two young children in a natural, outdoor setting. One child is sitting on a red metal chair, using a laptop. The other child is standing next to them, looking at the screen. The background shows trees and dry grass. The entire image is overlaid with a semi-transparent purple filter.

## REGIONAL FOCUS: **MIDDLE EAST & AFRICA**

IABM – December 2017

### FUTURE REGIONAL REPORTS

January: Latin America

April: North America

June: Asia-Pacific

September: Europe



## Business Environment

**As we approach CABSAT 2018, which takes place between the 14th and 16th of January in Dubai, it is appropriate to make the Middle East and Africa our regional focus for this Quarterly Digest.**

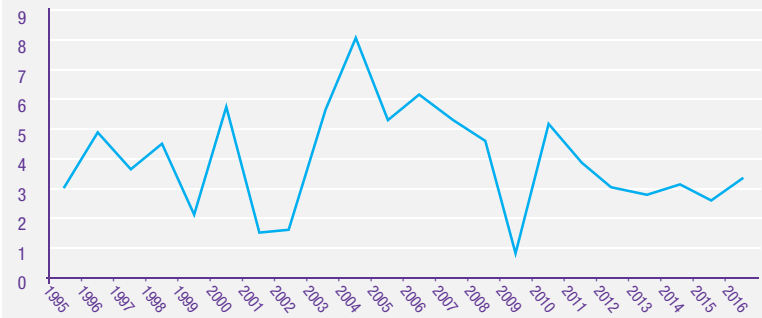
The Middle East and Africa (MEA) region is made up of diverse countries with strong cultural and religious values present in everyday business and economic activities. Geopolitical challenges continue to sweep the region, with war-torn countries such as Syria, Yemen and Libya unable to focus resources on economic development needed for regenerating the business and social climate. Moreover, the emigration of refugees from these war-torn lands to neighboring countries, such as Lebanon, has put pressure on neighboring government resources and strained infrastructure.

On the other hand, countries such as Tunisia and Egypt have been attempting to embrace democracy and adopt policies to promote an improved business environment. However, the challenges continue due to the negative spillovers from conflicts in neighboring countries and the deep divides between different religious communities.

Commodity prices, especially oil, are very important in this region as many countries are dependent on these to drive their revenues. Oil prices have declined since 2014 and have not been able to recover to that level, staying around the US \$50 mark. The Gulf Cooperation Council (GCC) countries have undiversified economies, Qatar and Dubai being exceptions, with heavy dependence on oil revenues to finance government spending. Therefore, when revenues are low, certain sectors that are seen as less important will not receive sufficient investment.

The GCC countries have started to adjust conditions to adapt to this new reality of lower prices, due to the slowdown in economic growth. OPEC has agreed to reduce production, with Saudi Arabia cutting the most, for oil prices to gain momentum globally. However, compliance with the cuts has not been optimal, as some nations cannot afford to cut production, putting further pressure on oil prices. Also, production in Libya and Nigeria increased, as these two nations were exempt from the OPEC deal, which has offset the decrease in production from fellow OPEC members. The OPEC deal ends in March 2018, so oil producers in this region may face a drain on public finances.

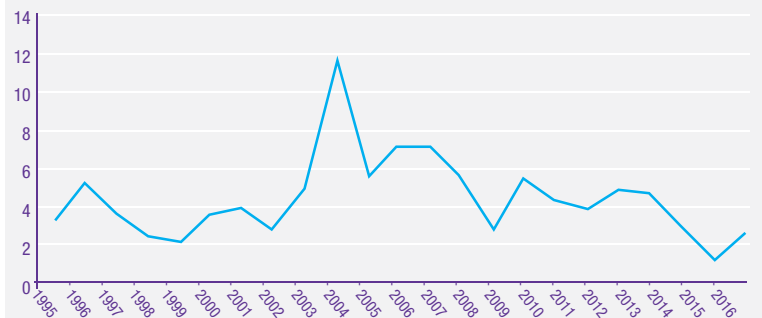
Chart 11: Middle East and North Africa GDP growth (annual %)



Source: World Bank

According to World Bank data, as of 2016, GDP growth in Middle East and North Africa was at 3.2%. This is forecasted to fall to 2.1% this year, due to the difficulties experienced by oil-exporting countries. The Gulf Cooperation Council (GCC) countries are implementing policies that will generate extra revenues, one being the introduction of a Value-Added Tax (VAT) in January 2018. There is also a move to attract greater investment to the region to drive future output growth through increased infrastructure spending – roads, airports, hotels, attractions. The GCC countries are committed to diversifying their economies towards more knowledge- and service-based environments, especially Dubai. Dubai has secured its position as a leading tourism, financial and business hub with a developing real estate sector.

Chart 12: Sub-Saharan Africa GDP growth (annual %)



Source: World Bank

Sub-Saharan Africa experienced GDP growth of 1.2% in 2016, and this is expected to increase to 2.6% in 2017, according to World Bank data (see Chart 12). This part of the region is showing promise due to slowly rising metals commodity prices, and its focus on tackling the less favorable macroeconomic conditions. Geopolitical challenges are also impacting certain nations, which



# MIDDLE EAST & AFRICA

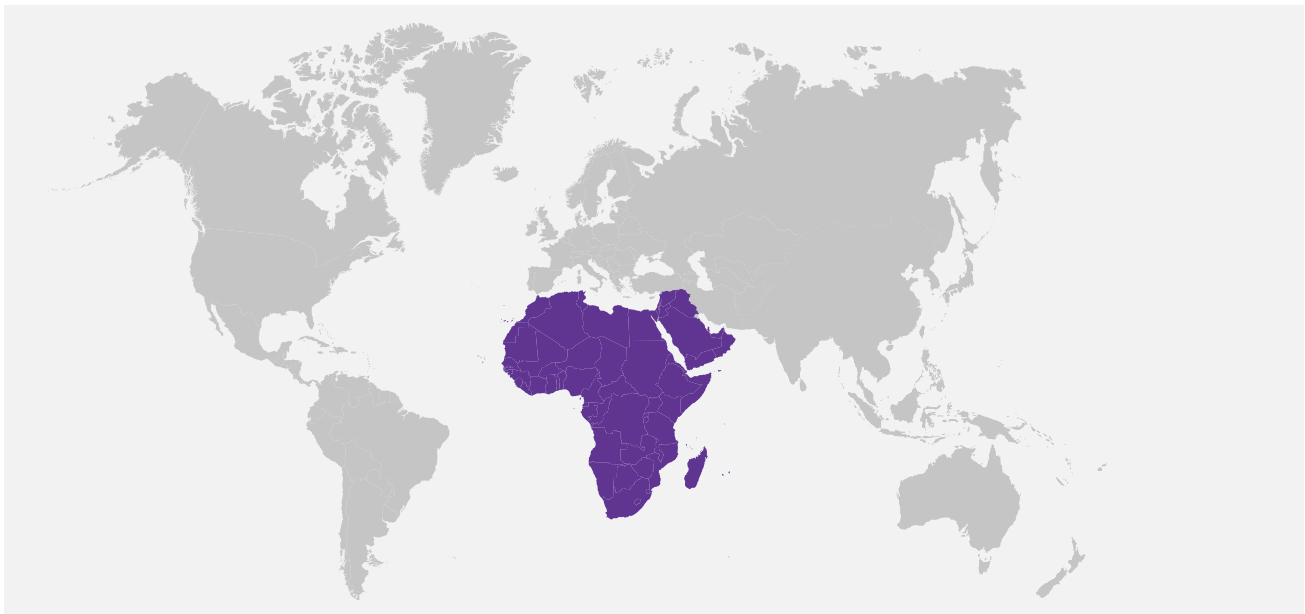
as with Middle East and North Africa, results in negative spillovers for neighboring countries. This impacts the business environment by reducing foreign direct investment and overall confidence.

Sub-Saharan Africa is also highly dependent on revenues from commodities, with fuels, metals and ore accounting for the highest percentage of exports. Thus, a drag on revenues from

falling commodity prices has been a reality for Sub-Saharan Africa since 2014. Due to this region being highly undiversified, when commodity prices fall, the economic and business environment experiences a slowdown. Metals and ores have been improving this year, which is why the predicted growth for Sub-Saharan Africa is expected to increase compared to 2016.

## Market Overview

**Middle East and Africa (MEA) is a vast region, home to many different ethnicities and nationalities. It includes countries such as the GCC states that have living standards comparable with North America and Europe. Africa's standards of living still lag behind most of the world's and its technology infrastructure is largely underdeveloped.**



Therefore, the transition to digital broadcasting represents the most important driver of broadcast and media technology spending in Sub-Saharan Africa with other transitions (HDTV, 4K/ UHD, OTT) still at early stages. Due to these differences in development, while describing the Middle East and Africa region, we will often make separate observations for the Middle East and North Africa and Sub-Saharan Africa.

As mentioned above, in the business environment section, the geopolitical turmoil has done little to promote business confidence in the region. However, the situation continues to improve in certain nations as governments adopt policies promoting business and investment to encourage development.

Moreover, oil prices have struggled to gain momentum in the global market, adversely affecting oil-exporting countries. The Middle East and Africa region has a large proportion of countries that rely heavily on oil revenues to fund government

spending. As many broadcasters in Middle East and Africa are state-funded, the decline has had negative effects on the broadcast and media technology industry. In fact, some broadcasters backed by state aid saw their budgets cut following the decline in oil prices. Analysts have forecast that oil prices will remain around the US \$50 / US \$60 mark with only modest increases in the foreseeable future. However, many oil-dependent countries are diversifying their economies through specific policies, such as taxes.

Despite these challenges, the Middle East and Africa region remains an attractive destination for business opportunities for broadcast and media technology suppliers. In a recent report by IDATE, it is predicted that the TV market – representing revenues for broadcasters and media companies – will grow by 30% between 2016 and 2021, mostly driven by Sub-Saharan Africa, which is predicted to be the world's fastest growing TV market in the next five years. According to IDATE this growth will be primarily driven by satellite, serving

serving over 80% of households in Middle East and North Africa with Sub-Saharan Africa at 40% and rising in 2016. According to IHS Markit, in the Middle East and North Africa region, online video revenues were US\$500m in 2016 – 51% year-on-year growth from 2015. The IHS Markit analysis further predicts that online video revenues will grow to more than US\$1.5bn in 2020.

In most of the Middle East and Africa region, free-to-air television is largely dominant although Pay-TV penetration has been slowly rising in recent years. The growth of Pay-TV has been significant in the Middle East and North Africa, whereas Sub-Saharan Africa shows slower growth. According to recent IHS Markit research, the number of households with Pay-TV services topped five million at the end of 2016, an 8% increase from 2015, with 15% revenue growth to US\$2.27bn. IHS Markit expects revenues to reach US\$4.03bn in 2021, with growth largely fueled by the GCC countries, where Pay-TV penetration is currently at 60%. North Africa lags behind the Middle East due to the economic and business climate, with Pay-TV penetration in countries such as Egypt at 3%, however it remains an attractive prospect for growth.

Sub-Saharan Africa also continues to see growth in Pay-TV subscribers. According to Digital TV research, as of 2016, there were 19.47 million Pay-TV subscribers with revenues at US\$4.20bn. This is expected to almost double to 36.72 million subscribers in 2022, with revenues reaching US\$6.59bn. The growth is primarily driven by South Africa and Nigeria. Digital TV research predicts that South Africa will go from 6.39 million current Pay-TV subscribers to 9.14 million by 2020, with Nigeria growing from 4.46 million to 8.45 million in 2020.

The primary delivery method in the region is satellite with IPTV on the rise, particularly in the Middle East and North Africa. SVOD is still not widespread as low broadband penetration and quality still challenge its development. However, the situation in some countries is expected to improve in the coming years as governments roll out national broadband plans. Poor payment infrastructure is also a constraint to SVOD development.

Advertising remains the most successful business model in the Middle East and North Africa, however IHS Markit predicts that SVOD will gain ground – overtaking advertising. Advertising represented 65% of revenues in 2016, while subscription services, Pay-TV and SVOD, experienced growth of 137% representing 30% of revenues. IHS Markit predicts that by 2020, subscriptions will represent 45% of revenues.

Piracy remains a major challenge in the Middle East and Africa. A report by International Data Corporation (IDC), estimates the cost of illegal content distribution for the industry at more than US\$750m in this region. According to a recent survey done by Irdeto, more than half of the residents in MENA admitted to watching pirated content – 53% in the GCC countries and 59% in Egypt. Millennials are more inclined to

watch pirated content – 62% of residents aged 18-24 years in the GCC countries and 64% in Egypt watch pirated content. There is a clear lack of education around the issue of online piracy as residents responded that they would stop watching pirated content if they understood the negative consequences for the media industry – 47% in GCC countries and 46% in Egypt.

Although Middle East and North Africa is home to many expats, a driver for foreign content, localized Arabic content is of equal importance. Due to this, subtitling and dubbing represents another challenge in the Middle East and North Africa as viewers, particularly in the GCC states, are mostly expatriates and demand content in a variety of languages and dialects. Netflix has recognized the importance of Arabic movies and content, with plans to produce an Arabic TV series. Existing original content provided by Netflix in the Middle East and North Africa region has been localized by adding Arabic subtitles, but dubbing is not yet available.

Reed Hastings, CEO of Netflix, said:

*“For us [the Middle East] is a big area of investment because state TV is highly regulated and so it doesn’t please that many people. So the internet – whether that’s YouTube or Netflix or Starz Play or Starz Arabia, any of those – has a real excitement because you can get relatively uncensored and interesting stories.”*



Competitive pressures continue to increase in the Middle East as on-demand services compete with FTA satellite channels. The region has a diverse population, home to many different nationalities with different income levels, so a one-size-fits-all approach will limit market reach. Branding and acquiring premium content rights is important to engage a wider audience and stay ahead of competition. A recent Ipsos report highlighted that in the Middle East and North Africa consumers struggle to identify online or mobile video platforms – consumers who are able to are most likely to mention YouTube.

The 22nd edition of the FIFA World Cup is scheduled to take place in Qatar in 2022; Qatar will be the first Arab country to host the tournament. The event broadcasting rights for the MENA region have been won by beIN. This event will arguably drive broadcast technology spending in the region, despite the small size of the host country. Interestingly, various sources confirm that Qatar intends to build an underwater studio costing US\$30m for the coverage of the World Cup. The development of a 25,000-kilometer fibre-optic IP network covering the whole country may also allow broadcasters to rely on IP-based broadcast solutions, which will arguably be more pervasive in live production by 2022.

## Business Opportunities

**We examine specific trends driving broadcast and media technology spending in Middle East and Africa. The trends we discuss are:**

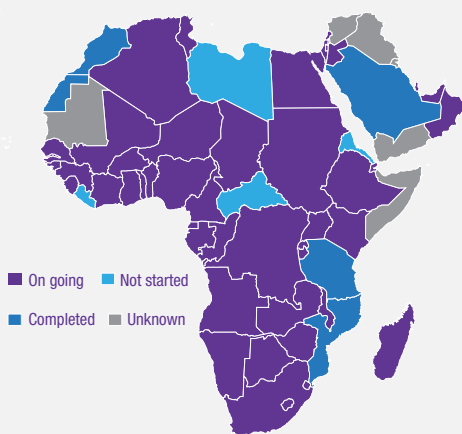
- Transition to Digital Broadcasting
- Transition to HD and UHD
- OTT and Multi-Platform Delivery

The transition to digital broadcasting is a government-led initiative that has encountered many problems in the Middle East and Africa. The transitions to HD, UHD and multi-platform delivery are instead natural evolutions of broadcasters' infrastructures.

### Transition to Digital Broadcasting

The transition to digital broadcasting in the Middle East and Africa is still underway as only a few countries have completed it. In the Middle East, these are Israel, Saudi Arabia, and the UAE, while in Africa only Morocco, Malawi, Mozambique, Rwanda and Tanzania have completed the transition to digital broadcasting. Despite the global deadline set by the International Telecommunications Union, of June 17 2015 to cease analog transmissions, the transition has been sluggish. The chart below shows a detailed map of the transition status of countries to DTT in the Middle East and Africa.

**Chart 13: Middle East and Africa: Status of transition to Digital Terrestrial Television Broadcasting**

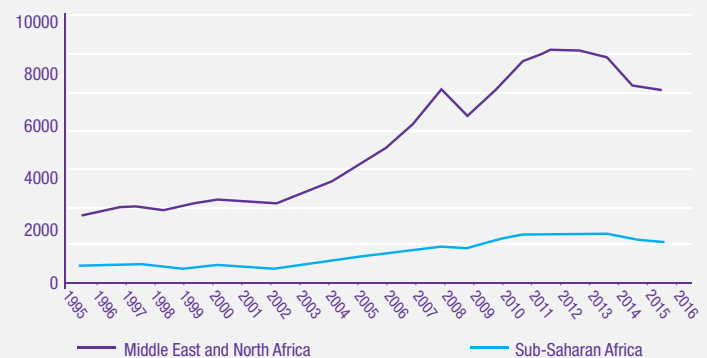


Source: ITU

As in the case of Latin America and many Asia-Pacific countries, there are several challenges. One of the main constraints is the low disposable incomes reported in most countries in this region (see Chart 14), which make the replacement of old analog equipment with digital set-top boxes or converters difficult to implement unless governments decide to intervene. Intervention in this matter is often deemed not a priority by governments – which remain focused on other issues – due to the lack of revenues generated through this investment.

Consumers in this region often lack awareness of the benefits of digital broadcasting due to the absence of government campaigns on the subject. Some broadcasters do not feel compelled to go digital as they fear they would lose most of their viewers – who often cannot afford to buy the necessary equipment. Moreover, the absence of a local supply for digital equipment represents an important issue in countries with hefty import duties.

**Chart 14: Middle East and North Africa and Sub-Saharan Africa GDP per capita (000's)**



Source: World Bank

Exchange rate volatility has caused numerous African currencies (notably the Nigerian Naira and the South African Rand) to depreciate against the US Dollar in both 2016 and 2017, making the purchase of digital equipment from foreign suppliers even more costly. Due to this, there is very little or no return on investment. As mentioned earlier, this is not the case for Middle East countries as most of them have currencies pegged to the US Dollar.

In some cases, nearing the completion of the transition in one country has presented the potential risk of interference with analog signals in neighboring countries. This may happen again in the absence of cooperation between neighboring countries.

The mitigation of these challenges has acted as an enabler for a timely digital transition in very few cases. In

fact, most governments in these regions lack the resources to finance digital equipment for TV households, carry out awareness campaigns or reduce import duties for digital equipment. The lack of financial resources has prompted some African countries to turn to China for help. Aside from the case of Nigeria, China pledged to help 10,000 African villages have access to satellite TV, supporting viewers in remote areas to acquire information on digital TV. Most of China's financial support will be based on investment by Chinese technology companies backed by US \$10bn of the China-Africa Development Fund.





In this region, most of the countries that have yet to transition to digital have chosen to deploy the European DVB-T2 standard, some using MPEG-2, others MPEG-4. The countries that have already migrated to digital broadcasting chose DVB-T – some of them are now transitioning to DVB-T2. The transition to digital broadcasting is a significant driver of spending for transmission-related equipment in this region with increased investment going into this over the coming years.

## Transition to HD and UHD

The transition to HD in the Middle East and Africa region is still at an early stage. While some countries in the Middle East and North Africa have made notable improvements in HD channel deployment, Sub-Saharan Africa is still grappling with the difficulties of transitioning its broadcasting infrastructure to digital. With developments in the transition to digital broadcasting, an increasing number of HD channels will be launched in Sub-Saharan Africa. It is worth noting that South Africa represents an exception to this trend.

In the Middle East and North Africa, increased HD channel growth has been driven by the expansion of satellite, which is the dominant transmission technology in the region. This is similar to what is happening in Latin America. Recent research shows that both the number of HD channels and HD equipment penetration have grown significantly in recent years. GCC countries show greater than average HD adoption due to their higher level of disposable incomes. In contrast to developed regions, HD remains a differentiator relied on by Pay-TV operators to attract new subscribers. As Pay-TV penetration is still low (and piracy is rife), HD still does not reach a large share of the population. Major providers of HD channels in the Middle East and North Africa are established Pay-TV operators such as beIN and OSN, which deliver over 80% of the HD channels in the region.

In Sub-Saharan Africa, the completion of the transition to digital broadcasting within the next four years will provide broadcasters the increased bandwidth efficiency needed to deliver HD channels. Even in Sub-Saharan Africa's case, HD channel growth will be mostly driven by satellite expansion. In October 2016, Intelsat entered an agreement with MultiChoice, a leading Pay-TV satellite operator in Africa, to provide broadcasting and DTH services.

MultiChoice was one of the first broadcasters to move its operations to digital in the region. Intelsat said in the press release:

*"The satellite will enable our customer, MultiChoice, to extend high definition channels throughout the region."*

MultiChoice's satellite television service, DStv, offers over 20 HD channels. The other provider of HD channels in South Africa is OpenView HD, an FTA satellite television platform offering over 15 channels in high definition. Other countries

in Sub-Saharan Africa are yet to make notable improvements in the provision of HD.

Increased adoption of advanced compression technologies such as HEVC and the decreasing cost of satellite bandwidth will act as catalysts for increasing HD channel growth in this region.

The adoption of UHD in the Middle East and Africa region has been limited to some rare cases so far. These include major Pay-TV broadcasters in the Middle East and North Africa looking to have a competitive edge over their rivals. beIN and OSN have made some initiatives in this regard. beIN launched its 4K/ UHD receivers ahead of UEFA EURO 2016; the Pay-TV operator broadcast some of the tournament matches in the new format. beIN is a major broadcaster of sports content – a very popular genre in the Middle East and North Africa. Its investment in UHD is mainly aimed at attracting new subscribers.

OSN partnered with Eutelsat in 2016 to support the growth of its existing HD channel portfolio and launch its upcoming 4K/ UHD offering. Martin Stewart, OSN CEO, said that the company will launch 4K television services by the end of 2017 despite piracy challenges and competition from FTA television.

UHD does not represent a significant spending driver for this region. Spending on UHD technology will be mostly made by established operators such as beIN and OSN in the next three years.

As in the case of HD, both the adoption of advanced compression techniques and the decreasing cost of satellite capacity will enable more growth for UHD channels. Arguably, this growth will be driven exclusively by the investment of Pay-TV operators.

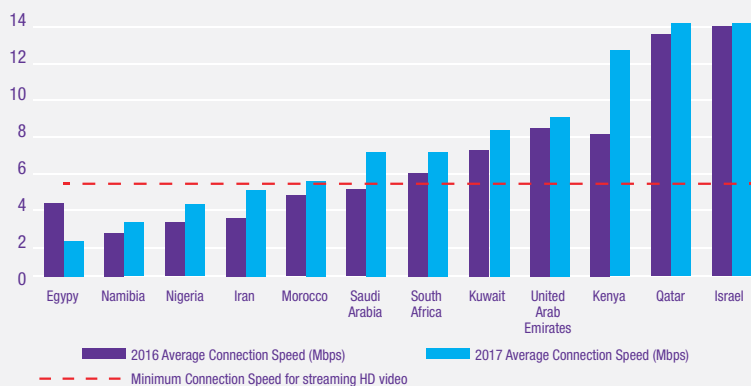


# MIDDLE EAST & AFRICA

## OTT and Multi-Platform Delivery

In the Middle East and Africa, OTT penetration is still at low levels due to constraints such as broadband quality and payment infrastructure. Low disposable incomes and piracy are also significant hurdles to OTT growth in this region.

Chart 15: Average connection speeds in selected MEA countries



Source: Akamai State of the Internet Report 2017

According to 2017 ITU data, the proportion of internet users stands at 43.7% in the Arab States compared to 21.8% in Africa. Moreover, the Arab states and Africa stand out for the lowest fixed-broadband subscriptions compared to other regions, with Africa at 0.5% per 100 inhabitants and the Arab states at 3.7%. As far as broadband speed is concerned, Akamai's State of the Internet Report shows that average connection speed in GCC countries such as UAE and Qatar is about 10Mbps while in less developed African countries can be lower than 4Mbps (the recommended speed for streaming HD quality video).

In the Middle East and North Africa, the local pure-play OTT operators are Icflix and Istikana, launched between 2011 and 2013. These services follow the Netflix model with a stronger focus on local content. Interestingly, to circumvent the problem of low credit card penetration, many SVOD providers have provided payment methods through mobile billing, thus avoiding the need to use debit or credit cards.

In Sub-Saharan Africa, there were no relevant OTT initiatives aside from the presence of Netflix. However, recently Iflix, an-Asia based VOD service, launched in Nigeria, Zimbabwe, Tanzania and Kenya – it is already available across the Middle East and North Africa. Iflix wants to position itself as an alternative to pirated content, offering a subscription at US \$2.50 a month – the price to purchase a single pirated DVD. The company will invest in local content and originals to gain traction in the region.

## IABM MEDIA TECHNOLOGY TRENDS REPORT

The information contained in this Regional Update is derived from our newly published Regional reports, which are available on the [IABM website](#) – the first Regional report focuses on the Middle East and Africa.

The full report on the Middle East and Africa contains an overview of the business environment, an overview of the broadcast and media technology industry and an analysis of technology buyers and demand drivers. This should provide member companies more tools to better address opportunities and challenges in new markets.

In an ever-changing industry such as media technology, it is increasingly important for suppliers to keep track of regional trends and broadcast and media technology developments within these regions.

The table of contents for the full report is provided below:



### Market Overview

### Business Environment

Middle East and North Africa

Sub-Saharan Africa

### The Broadcast and Media Technology Industry

Overview

Major Media Technology Buyers

### Media Technology Demand Drivers

Transition to Digital Broadcasting

Transition to HD and UHD

OTT and Multi-Platform Delivery



An aerial photograph of a city skyline, featuring several prominent skyscrapers and a dense urban landscape. The image is overlaid with a semi-transparent purple rectangle in the center, which contains white text. The overall tone is modern and professional.

## **FUTURE REGIONAL REPORTS**

January: Latin America

April: North America

June: Asia-Pacific

September: Europe





## Knowledge, support and leadership for media technology suppliers

IABM is the international trade association for suppliers of broadcast and media technology. IABM facilitates the important networking and interaction between suppliers that shape and define the unique ecosystem of the broadcast and media technology industry.

IABM supports member companies with a comprehensive range of services across market intelligence, training, technology,

exhibitions and best practices – all designed to help them do better business. We hold the interests of member companies as paramount, and strive to provide strong guidance and support at every level in all geographies.

We understand that in today's rapidly changing media landscape, our members have never had a greater need for timely, relevant and effective advice and support. IABM's mission is to be an ever more powerful beacon that is highly responsive to all our members' needs in a timely fashion, helping them to prosper and navigate change successfully.

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