Regional players discuss IP adoption in broadcast ecosystem
Last month, I had the good fortune of visiting two different countries and participating in two completely different events. Although vastly different in scope and style, both were eye-openers and very humbling.

Canon Expo Paris is an exhibition that the company puts on every five years to showcase its latest releases as well as prototypes on which the company is working. I must confess that I had never really given much thought to digital imaging or the multiple ways in which it could possibly benefit mankind in various fields, until I visited the Expo. It opened up a whole new world of possibilities and unveiled a future that could be made better with digital imaging. Cameras, printers and projectors apart, it was interesting to see how digital imaging has evolved to make mammograms more efficient with less radiation, surveillance cameras that can accurately profile a person in terms of age, gender and so on, and 3D techniques for architectural projects.

On a completely different note, BroadcastPro ME had the pleasure of working closely with Arabsat to host the satellite company’s annual customer forum, Atheer. Besides the trust they showed in us, it was hugely humbling to see the who’s who of the MENA broadcast world attend. The ever elusive CEOs, whom we never see elsewhere, were not just present at Atheer, they were also significant participants in panel discussions, interviews and other similar activities aimed at sharing their knowledge and experience while also networking with like-minded people. But that’s not all. We have one more big event this year – the ASBU BroadcastPro Television Summit and Awards on November 10 – before I can breathe easy. If you haven’t registered to attend so far, may I suggest you take a moment to visit www.broadcastprome.com and register your interest before we close registrations. See you at Habtoor Grand on November 10, 9:30am sharp.
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PXW-FS5

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Media companies leverage the web to distribute content

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BeIN launches entertainment bouquet

BeIN has shocked the Middle East TV market by launching an entertainment bouquet with 24 channels of full HD quality on November 1, 2015. BeIN, which only broadcast sports content previously, has promised to make pay TV more affordable and is looking to increase its subscriber base with this move. "BroadcastPro ME" broke the story last month.

Nasser Al Kheifi, Chairman and CEO of beIN Media Group commented that the media entity had "identified a sweet-spot in terms of pricing of pay TV in the region that has traditionally been over-priced". "It was natural for beIN to offer the latest blockbuster movies and family entertainment along with our premium sports offering. BeIN’s vision is to reshape the future of pay TV and family entertainment in the MENA through premium multi-genre entertainment at affordable prices," he commented.

BeIN subscription packages now include sports content as well as the latest Hollywood movies and other family channels. It recently signed a deal with Fox International Channels (FIC), according to which Fox and Fox Movies channels will be available exclusively on beIN. In addition, National Geographic Channel, Nat Geo Wild, Nat Geo People, Star Movies HD, StarWorld HD, Channel V International and Baby TV from FIC will also be available on beIN, although not exclusively.

The new channels will be available to beIN’s existing subscribers free-of-charge until the end of 2015, while new subscribers will be able to purchase a comprehensive package.

Hassan Ghoul joins Master Media

Hassan Ghoul, a well-known figure in the MENA broadcast industry, has joined Master Media, a media consultancy and professional services firm based in the UAE. Ghoul will be leading Master Media’s consultancy and advisory services.

With more than three decades of experience as a broadcast professional, Ghoul was most recently Regional Director for Grass Valley in the Middle East.

Netflix heads to the Middle East

After its recent foray into European markets, Netflix is now looking to expand into the Middle East. Keeping up a quick pace of expansion into new territories, the streaming company has now launched in Italy after its debut in Spain and Portugal. The Middle East may be its next stop over the next year.

According to reports, Netflix’s Joris Evers wrote in an email to online portal IGN ME that the SVOD giant plans to complete its global expansion by the end of 2016 and that the Middle East is part of that. Netflix is also hiring for the region. Job positions have been posted on the company’s web site for Marketing Planning and Analysis Manager EMEA, Senior Manager - EMEA Marketing Insights, and Social Media Manager for the region.

Netflix has nearly doubled its subscriber base in the last two years, with plans to launch in four new Asian markets in early 2016 after debuting in Japan. In early 2015, Netflix said it aims to be present in 200 countries by the end of 2016.

News Flash: Fox Middle East partially exits FTA space with Fox and Fox Movies now available exclusively on beIN

Fox Middle East has partially exited the FTA space with Fox and Fox Movies now available exclusively on beIN. It recently signed a deal with Fox International Channels (FIC), according to which Fox and Fox Movies channels will be available exclusively on beIN. In addition, National Geographic Channel, Nat Geo Wild, Nat Geo People, Star Movies HD, StarWorld HD, Channel V International and Baby TV from FIC will also be available on beIN, although not exclusively.

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Nasser Al Khelaifi, Chairman and CEO of beIN Media Group.

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OSN unveils programme line-up for 2016; launches new channels

The pay-TV network also launched the region’s first Digital Video Store. Ahead of the announcement in Dubai, OSN’s senior executives and Hollywood celebrities Antonio Banderas and Maisie Williams provided a sneak preview of the new programme line-up. 2016 will see more than 50 new and exclusive shows, plus 70 continuing series.

Micky Edwards has joined Amagi Media Labs as Head of Sales EMEA and UK. Edwards will be based in the UK. He was previously VP Sales EMEA and Asia at BroadStream Solutions.

Radolphe Bétnier will succeed Michel de Rosen in the role of CEO of Eutelsat from March 2016. He will join as Deputy CEO in December, alongside Michel Aïbert, Chief Commercial and Development Officer.

OSN unveiled its line-up of new programming for 2016 and marked the launch of three new dedicated movie and entertainment channels.

**NEWS IN PICS**

Advanced Media recently hosted a workshop to introduce Sony’s latest 4K releases, the A7R II and the A7S II. Attended by nearly 50 filmmakers and end users, the workshop featured footage from the two cameras on 4K monitors and demonstrated the camera’s capability in low-light conditions.

Advanced Media hosts Sony Alpha 7 workshop

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Teranex Mini features extremely high speed BNC connectors for fast 12G-SDI rates plus professional XLR connectors for balanced analog or AES/EBU audio and timecode. The built in power supply uses a standard IEC AC power connection. Teranex Mini also supports power over ethernet (PoE+) so you don’t even need to plug in AC power!

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The easy to install optional front panel adds push button controls and bright color display so you can quickly change settings and see the video and audio levels. You also get on screen menus for all settings. Plus you can administer the converters remotely via the built in ethernet connection on Mac OS X and Windows computers!

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**Teranex Mini Accessories**

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**Teranex Mini SDI Models**

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Advanced Media hosted Sony Alpha 7 workshop

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Dubai's position as an international filming hub received a further boost as two Hollywood films shot major sequences in the emirate last month. The Dubai leg of the filming of Star Trek and Jackie Chan’s Kung Fu Yoga began last month. Residents spotted helicopters hovering over buildings in Jumeirah Lakes Towers, and trucks carrying equipment and crew in some neighbourhoods in Dubai. Some of the roads in iconic locations in the emirate, such as Downtown Dubai, DIFC, Jumeirah Lakes Towers and Meydan, were cordoned off to accommodate the film crew.

A lot of the exterior work on the film was done in Dubai. Two Emirati interns were sponsored by the Dubai Film and TV Commission (DFTC) to spend four days on-set in Vancouver for Star Trek: Beyond. Jackie Chan’s first film in the Middle East, Kung Fu Yoga, also wrapped up the Dubai leg of its shoot last month. The film brought around 100 international crew to the emirate, and also employed a large pool of local talent for filming. Car chase sequences were shot in Downtown Dubai. The film will showcase Dubai’s skyline and world-class infrastructure.

**48-Hour Film Project returns to Dubai**

Dubai will be one of the 130 cities worldwide competing in the 48 Hour Film Project this month. Commenting on the project, Mo Rida, Dubai Producer, 48 Hour Film Project, said: “On November 12, participating teams will gather at AM Studio in Al Quoz where they will be given a genre, a character, a prop, and a line of dialogue they must work into their film. Films will have to be completed within the stipulated 48 hours and late entries will be disqualified.” Supported by Dubai Film and TV Commission, this is the fifth consecutive year that the competition returns to Dubai.

**Ali Mostafa wraps up filming of Emirati action thriller**

Image Nation Abu Dhabi has concluded production on its latest Emirati feature film, Worthy. The action thriller is Emirati director Ali Mostafa’s third feature. Last year, Image Nation, in partnership withheed4uSA, released Mostafa’s road trip comedy From A to B, launched in the UK last month at BFI London International Film Festival. Mostafa’s first feature film was 2009’s City of Life, arguably the first Emirati blockbuster. The film stars an ensemble cast of Arab actors from across the region, including Samir Ismael (Omar) and Ruba Blal (When I saw You). Mostafa teamed up once again with Syrian actor Samer Al Masri (Arab Al Haral, Palestinian actor Ali Suliman (Zinzana, Paradise Now) and Emirati Habib Ghuloom (City of Life), all of whom have appeared in the director’s past features.

**DIFF announces Muhr lineup**

Dubai International Film Festival (DIFF) has announced the lineup for the Muhr Short Competition. Demonstrating regional talent through the encapsulating medium of shorts, the competition is set to host 15 films over the course of the festival, from December 9-14, 2015. Now entering its ninth year at DIFF, the Muhr Short Competition provides an exclusive platform for Arab filmmakers to gain global recognition and support. The competition is an opportunity for one talented director to have international exposure, as the winning short film will qualify for consideration for the 2017 Academy Awards. The festival has also announced the selection for Cinema of the World, which will include 45 films from around the globe.

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MIPCOM 2015 spotlights drama

The 2015 edition of MIPCOM closed on October 8 with deals, key alliances and project announcements. Leading executives spoke about the health of the television industry and its future.

Fox TV Group’s Dana Walden publicly proclaimed that content creators now face “a hit-driven business.”

This year, MIPCOM hosted an expanded World Premiere TV Screening programme and an unprecedented number of major dramas, each supported by an array of talent reminiscent of the Cannes Film Festival. Commenting on the international appetite for major drama projects, Armando Nunez, President and CEO of CBS Global Distribution Group, said: “We have never seen as healthy and robust a demand for premium content as we are currently seeing. I don’t expect that view is going to change at any point in the near future.”

The inaugural MIPDrama Screenings next year at MIPTV will offer some 250

PRONEWS
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"The demand for premium drama
was reflected by the packed World
Premiere TV Screenings and the major
series that were brought to MIPCOM,”

noted Laurine Garaude, Director of
Reed MIDEM’s Television Division. With
MIPCOM bringing together international
broadcasters, the US majors, TV production and sales companies, digital powerhouses such as YouTube, Netflix, Hulu, Facebook, Amazon Studios and Twitter, and newer OTT players like UK-based Hopster and leftx in the Middle East, there was considerable conference attention on how OTT, SVOD and streaming services are transforming business models and strategies.

According to Digital TV Research, OTT live and VOD services will generate around $25 billion this year and $56 billion by 2023. According to Andrew Moss, Chief Commercial Officer at media strategy consultancy Oliver & Ohlbaum, audiences of the future will consume content by “distribution methods we haven’t even contemplated yet”. He told a Carriage

Deal Forum meeting that opportunities remain for channel operators, particularly in the BRICS countries.

Speakers talked of the power and import of great content and the need to form strategic partnerships in the multi-platform entertainment ecosystem. Media Mastermind keynote speaker Sophie Turner Laing, Endemol Shine Group’s CEO, rebuffed naysayers on the demise of TV. She told her MIPCOM audience that in one of the most exciting times for the business, forming partnerships with different media creators is the path forward in the multi-platform world.

Exports of Turkish TV series are expected to be worth $850 million this year, an astonishing number given that international sales were valued at less than $100,000 in 2004. Istanbul Chamber of Commerce President Brahim Calar commented: "With a sharp rise in quality and branding in the sector, Turkey has now exported TV programmes and soap operas to more than 80 countries – from the Middle East to Eastern Europe. The Economy Ministry’s target is to achieve TV series exports worth $1 billion by 2023.”

MIPCOM shone the spotlight on Abu Dhabi as a production and content creation hub by hosting a panel discussion featuring twofour54’s Paul Baker and content creators from the region. Emirati company Majid Entertainment participated in the MIP Junior International Pitch.

Omantine, Oman’s largest telecommunications operator, will offer an IPTV service using the platform of its neighbour in the Gulf, UAE telco du. Announcing the tie-up at GITEX in Dubai, du Chief Executive Osman Sultan, said: “Our partnership with Omantine marks a significant step for us as we continue in our steadfast growth throughout the region. We are now a regional ICT player, having diversified from pure telecommunications, and we’re expanding our offerings for regional incumbents.”

Icflix launches on gaming consoles

Icflix has partnered with Sony to stream movies and series via the PlayStation3 (PS3) and PlayStation4 (PS4) consoles.

The Icflix offering will include the latest Jazwood series such as Al Sayeda Al Oula, Seerat Hub, Best Al Shabbandar, Alwan Elteef and Cello alongside Award-winning Hollywood movies such as The Wolf of Wall Street, Hugo and The Tourist. PS3 and PS4 users subscribing to Icflix can also instantly watch TV shows including all five seasons of The Walking Dead and other popular shows such as Hell on Wheels, Mr. Selfridge, Peaky Blinders and The Book of Negroes.

Dubai Film launches VR app

The Dubai360 VR App was launched by Dubai Film and du during GITEX Technology Week 2015. Using high resolution 360-degree content procured by Dubai360, including panoramic images, 360-degree video and high-definition time-lapse videos, it gives users an experience of certain areas in Dubai. Users can download the app from the iOS or Android store at no cost to experience Dubai on their smartphone.

Yahlive and Alpha One RTV in content deal

Yahlive has signed a capacity deal of one transponder with Adriatic Tours S.L., owners of Alpha One RTV Network. The companies will collaborate to broadcast in eight languages: Russian, Serbian, Croatian, Albanian, Turkish, Spanish, English and Arabic, to Balkan communities in the MENA. The channels will provide premium TV entertainment as well as premium international content.

Omantine and du tie-up for IPTV in Oman

Dubai360 VR App

Dubai Film launches VR app

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Future Proofing with IP

In a roundtable hosted by BroadcastPro ME and SAM, regional broadcasters discussed the pros and cons of IP-based systems and how the new technology will steer the broadcast industry forward.

Broadcast over IP is perhaps the most discussed topic in the industry today. It was a key topic at IBC this year, and quite a few discussions centred on how and when IP will become mainstream in the broadcast space.

It’s almost a cliché now to say that the broadcast industry is experiencing a paradigm shift. The change has been especially noticeable in the past five years with workflows and processes increasingly moving towards software-centric architecture. Gone are the days of proprietary hardware, as manufacturers now aim to design more open and modular equipment to cater to the needs of the budget-conscious end user. The industry has evolved tremendously as the requirements change and we enter the age of the all-powerful user. While technology in broadcast is making strides, content still remains king.

There is no denying that IP is slowly making inroads into replacing traditional infrastructure – but is it there yet? Are broadcasters ready to ditch their patch panels and move to an all-new virtual workflow? We put these questions to regional broadcasters at a roundtable organised jointly by BroadcastPro ME and SAM (Snell Advanced Media).

End users including broadcasters and telcos offered their perspectives on the transition to IP. Also discussed were the challenges of end-to-end adoption of IP and whether it was commercially viable or just another cost for the end user. IP seems to be the route broadcasters are readying themselves to take, but the question is when. While some have definitive plans in mind to switch by next year, others have already started making the move by revamping some infrastructure. The panelists shared their experiences, expectations and concerns around the new technology and agreed unanimously that IP is the technology of the future.

Tim Felstead, Head of Product Marketing at SAM, opened the discussion. The panel included Saleh Lootah, Head of TV & Radio Engineering at Dubai Media Incorporated; Frank Kerrin, Director of Technology Support and Projects at OSN; Yusuf Al Buti, Acting Head of Engineering and Technology at twofour54; Eyad Al Dwaik, Senior Engineering Manager at Intigral; Peter Van Dam, Director of Technology at LIVE HD Broadcast Facilities – a subsidiary of Abu Dhabi Media Company; Muhammad Mefirah, Senior Director – Teleport Planning, du; Nick Burnatt, Senior Broadcast Manager at MBC Group; Oosman Kader, Vertical Propositions Team Lead – Business Marketing – Managed Services, Etisalat; Afzal Lakdawala, Head of Technology Planning and Projects at Dubai Media Incorporated; and Omar Alzoubi, Senior Manager – Engineering Systems, Dubai Media Incorporated.

The economics of transition from SDI to IP
Tim Felstead briefly spoke about how IP is increasingly becoming a hot topic of debate, and introduced the panelists. He opened the discussion with the question of the economics of transitioning to IP and whether it is a problem for the industry or an opportunity to evolve. Will IP simplify workflows and streamline complicated processes, or is this change simply an added cost, he questioned.

Saleh Lootah said he envisioned an organic transition and that broadcasters need to understand that it is an
"Is IP a problem for the industry or an opportunity to evolve? Will IP simplify workflows and streamline complicated processes, or is this change simply an added cost?"

Tim Felstead, Head of Product Marketing, SAM

"HD and 4K are now becoming mainstream. People will adopt the new offering if the difference in quality becomes more noticeable. Most of us are watching HD on UHD TV screens, and TV manufacturers are pushing for more 4K content."

Frank Kerrin, Director of Technology Support and Projects, OSN

opportunity in the long run.

"Eventually, we will all transition to IP, although we are not sure when that will happen. The question that's bothering most of the broadcasters today is if this move is just another added cost. IP is the way forward, especially when working with UHD and higher resolutions. To do that over our current infrastructure would incur tremendous costs. Right now, it's expensive to deploy IP as there is no fixed or final product that will allow us straight into IP. Many areas are still quite undefined in that space."

MBC's Nick Barratt agreed with Lootah on the advantages of moving to an IP infrastructure.

"From a distribution standpoint, traditionally we have always had these massive blocks or routers that last years. A move to IP would help consolidate the broadcasters' assets. In the long run, yes, I agree, it will be cheaper compared to what one would pay for updating legacy systems. It is most definitely the way forward and the time of transition can be anything up to ten years or less."

He pointed out that in the current scenario, a lack of agreed standards is deterring the adoption of IP. No one knows for sure what is required.

"I think it's important that the move to IP involves tighter integration and a certain amount of consolidation where everything involved is software. You only have an input and an output and get rid of multiple 3Gs flying all over the facility. That consolidation lends itself better to the data centre concept. Yes, it is an opportunity for us, but I am looking at it from a long-term perspective."

Eventually, broadcasters may be forced down the path of IP. The trigger here seems to be 4K.

"Do you go multiple HDs and SDIs, or do you instead choose IP and do it all in one stream? That's an opportunity, as you get all advantages of IP hardware," Barratt added.

Omar Almushfi pointed out that the move to IP will have to be incremental to take full advantage of the technology and have a cost gain in the long run.

"Traditional broadcast cannot handle certain areas, such as 4K, multiple formats, VOD, more content creation, where IP seems to be the only solution. Through good standardisation, IP will be adopted for high resolutions."

Aftab Lakhina also agreed that 4K was the biggest driver for the adoption of IP.

"The higher we go in resolution, IP becomes more and more relevant. We will not stagnate at HD or 4K, we will keep growing in technology and SDI has its limitations in terms of scalability where resolutions are concerned."

He pointed out that file-based workflows are based on IP infrastructure.

"We are already in it. The challenge is the live production side with real-time operations and minimum latency. Where IP is still not mature, but I believe that will also come with time."

Eyad Al Dwaik added that despite his love of patch panels, a move to IP was looming large and he couldn't wait for the time when he could route his signal by just plugging in a single cable, to replace unwieldy racks of patch panels and loads of cables under the raised floor.

"With IP, I will need to make changes to the infrastructure and need main/backup IP routers"
from a distribution standpoint, traditionally we have always had these massive blocks or routers that last years. A move to IP would help consolidate the broadcasters’ assets. In the long run, yes, I agree, it will be cheaper compared to what one would pay for updating legacy systems

Nick Barratt, Senior Broadcast Manager, MBC Group

instead of a single SDI router, I cannot just go with a single router, which will increase the cost. The current IP infrastructure cannot support a full 4K signal on a single cable. It’s still early days for 4K. We need more content, more devices to view 4K, and it seems like a long transition to 4K. However, IP is just around the corner, as early as next year for me. We plan to make our entire facility IP-based in the next five years.”

According to Nick Barratt, LTH multiplexing has input in IP but the output decoder is SDI, while databases are IP. Van Dam said that broadcasters are much further in some parts in IP than they think. “In a cloud environment, there will be less hardware. 4K for me is the next step, but we need to future proof the demand for 4K. IP seems to be the only way,” commented Van Dam.

Etisalat’s Osman Kader took the argument forward, stating that bandwidth is an expensive commodity in the region, which increases the cost of delivery to the end user. “Switching to IP is easy, but you will need 4K standards to transmit over IP! When you have to deliver this service to the end user, you have to have enough bandwidth to be able to do that. That’s an additional cost that we as operators and end users are considering whether to undertake or not.”

Market surveys show that users are already complaining about content and service being expensive, whether for internet or TV services in the region, which is one of the serious considerations. Felstead asked Kader if operators need to upgrade more fibre to the home (FTTH), which might raise their infrastructure investment. Does Etisalat bear the cost of upgrading as a telecommunications provider?

“99% of our customers are already connected through FTTH. On the distribution systems, however, we still have to consider the high investment we need to make to adapt to these new standards that keep coming up. Starting off with SD, where we were delivering 200 channels over 1G fibre, to where with 720p and 1080i in play we needed a 10G fibre to deliver the same number of channels; that exponential investment happens with every change in technology; and as an operator, we might never be able to recover this investment in the long run,” he replied, restating the importance of standards.

It’s a challenge for telcos to keep investing in infrastructure and keep upgrading it every time a standard changes. Therefore, decisions are made to stick to evolved technology rather than experimenting with new standards. Yauil Al Bati gave another perspective to the debate by pointing out that a move to IP involved a strategy change. “There is more than meets the eye when implementing IP. It’s not limited to an investment in technology, but also in application. The move will lead to newer business models for telecoms and broadcasters. New technology will give a new way of thinking. It won’t be an exaggeration to say that IP will eventually, we will all transition to IP. The question is when? I envision an organic transition. The question that’s bothering most of the broadcasters today is if this move is just another added cost. IP is the way forward, especially when working with UHD and higher resolutions”

Saleh Lootah, Head of TV & Radio Engineering, DM}

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open a whole new world of content and distribution models. It will lead to smarter use of multicasting and broadcasters will have newer ways to play with content, enriching it and transmitting it over thousands of boxes from homes to moving cars, and a lot more."

IP has a lot of applications which will come to the fore in the near future, he added, saying that telcos and broadcasters need to cooperate and work closely for easier distribution of content.

"I expect to see new standards by next year. Having said that, I would like to mention here that at the end of the day, everything revolves around how cost-effective the solution is. You need return on your investment."

ADM’s Peter Van Dam questioned the return on investment point, saying that technology-wise, IP is excellent to deliver more content in better quality, but will consumers pay for the millions of dollars that will be invested in the technology?

"I don’t think that a majority of people will readily pay more for a 4K signal. As a normal consumer, I am not sure if I will pay more for 4K," he commented.

"Customers will see where they get more content, the content that they want to watch. If we offered our customers a 4K channel, for instance for $100, and offered them the entire season for the same amount in full HD, they will choose the latter. As for government entities like DMI, ADM, twofour54, we need more content in 4K. On multi-camera outside broadcast production, the technology is not yet ready to produce and transmit 4K for live sports productions or TV shows."

OSN’s Frank Kerrin pointed out that every technology in its first few years is expensive.

"HD and 4K are now becoming mainstream. People will adopt the new offering if the difference in quality becomes more noticeable. Most of us are watching HD on UHD TV screens, and TV manufacturers are pushing for more 4K content." Lootah of DMI drew the panel’s attention to the backhaul aspect and said that satellite is another platform being looked at seriously for 4K. Muhammad Methar of du, however, disagreed saying that 4K distribution is more likely to be over fibre and will remain a niche offering to select high-end customers who will have fibre connectivity. Parallel traffic for SD and HD signals will be via satellite, to reach a larger customer base scattered across the MENA. It will take five years-plus for fibre to reach every home, he insisted. In order to watch UHD on TV, the viewing distance is important, as how many homes can afford it, Methar added.

"MENA is not a uniform region, it is quite diverse. Many people still watch cathode ray TVs; LEDs are not everywhere yet, so 4K for all still seems like a distant dream." MBC’s Barratt interjected to say that one needs to be careful about who is leading whom. "TV manufacturers are driving the adoption of 4K for now. 4K production is doable. The BBC did the Commonwealth Games last year. However, 4K for the majority of people in the region is a long way away." Kerrin informed that there is 4K transmission on Hotbird and other channels, and people are buying big 4K TVs as well. Alzoubi said that bandwidth requirement for 4K will not be less than 120M, and this can’t be done through traditional SD. Neither will the 10Gig E link do the job. 

"TRA imposes a heavy fee on IP. If you go over RF, however, they don’t charge as much and only charge for standard video delivery. All my signals are encoded and masked into different transponders and converted into L-band feeds" Eyad Al Dwaik, Senior Engineering Manager, Integral
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“New technology will give a new way of thinking. It won’t be an exaggeration to say that IP will open a whole new world of content and distribution models. It will lead to smarter use of multicasting and broadcasters will have newer ways to play with content”

Yusuf Al Buti, Acting Head of Engineering and Technology, twofour54

Although the 40GigE can do this, it’s not economically viable. Also, the new 12G-SDI will carry only one single video over coaxial cables and will have distance limitations. Van Dam pointed out at this stage about how the market dynamics are changing, with consumers dictating where their entertainment development is headed. It was the other way around earlier, when engineers used to innovate, make new technology, and offer it to consumers.

“Japan is already doing 8K. There was a time when TV manufacturers relied on us to lead the way based on new innovation. Not anymore.” He drew the panelist’s attention to remote production, which is gaining traction due to its flexibility and cost efficiency.

“Six years ago, I was asked to build a 3D truck with 20 cameras, but that never happened. It faded away. For me as a broadcaster, I can do a remote production over IP from the regular venues where I shoot about 20-30 times a year. Remote production over IP is a promising proposition and poised to be a major saving for us. That is where I see IP as a solution in the near future.

“The protocol for an uncompressed stream over IP is different from the one for a compressed stream. But we are moving towards uncompressed streams over IP.”

“New technology will help us simplify things and make our lives easier.看见!”

Standards in IP

Will people produce content and ignore standards? Are production standards unrelated to the delivery standards, and is this part of the IP transition as well? Felstead asked the panelists to shed light on the status of 4K and how it linked to IP.

“Emerged that the transmission part of the 4K chain is still unanswered. Broadcasters can handle the post-production of 4K material but need to then downconvert to HD to be able to deliver it. Lootah and Ali Buti noted. Alnabi pointed out that broadcasters cannot transmit 4K unless compressed, and that concerns around 4K go beyond expensive routers and high frame rates.

“IP technology can accommodate more content compared to SD. The main advantage of the SMPTE 2020 standard is that it allows us to squeeze many uncompressed video signals over a single IP port. For example, a 100 G link can carry three 3G channels, or six 1.5G channels, or 33270Mbit/s channels.” Alnabi said.

Al Dwaik added that the ecosystem has other limitations too, such as the prevalence of old set-top boxes.

“All broadcasters can do HD, but users have old boxes, ten or more years older. OSN, beIN Sports and Ooredoo have introduced new set-top boxes into the market, the HEVC-capable ones to compress files, in the future. They can implement HEVC in the future to reduce bandwidth and start transmitting in UHD, but to recover their capital costs they will have to charge people more for 4K delivery. On the other hand, PTA players

“Switching to IP is easy, but you will need 4K standards to transmit over IP. When you have to deliver this service to the end user, you have to have enough bandwidth to be able to do that.

That’s an additional cost that we as operators and end users are considering whether to undertake or not”

Osman Kader, Vertical Propositions Team Lead - Business Marketing - Managed Services, Etisalat

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like MBC cannot do that. End users are not ready even for HD signals in many parts of the MENA."

Is the end user ready to pay for better quality?

Barratt said that the end user wants good content. “While quality is important, broadcasters would rather put their money on more content. Where’s the driver to spend a substantial amount of money for a slightly better picture quality?” he asked.

“Some years ago, at a previous company, the last episode of a programme was misplaced and the only copy we had was an NTSC VHD, which we used on air. Although it didn’t look good, people still watched it,” Barratt noted.

While content reigns supreme, a number of factors impede technology deployment, especially in the MENA region, owing to its diverse demographics and economics. “In Egypt, which is a huge market for us, the challenge is to convince people to change their set-top boxes. Quite a large number of viewers in some parts of the MENA and Africa have CRTs. It’s a hard sell for us, for the extended region of GCC,” noted Kerrin.

Lakdawala steered the discussion towards IP in live production, commenting that a lack of standards in live production is holding it back.

“There are no set standards for live production, which has slowed down a widespread adoption of IP to a certain degree. At IBC this year, many vendors advised us to take it easy and wait until year-end next year to start doing something in terms of IP-based production. Standards will be more defined by then, people expect. However, a hybrid approach is good to start with,” he suggested.

The panel agreed that the adoption of IP will be incremental. Broadcasters don’t expect it to be an overnight transformation, but a gradual shift.

Lakdawala explained that whenever there is a technical upgrade, they create islands and gradually switch from the old one to the new one. “When HD was introduced, we had two scenarios where HD was less and HD was more, then we gradually began to increase the former. Eventually, this will be the case with IP as well. In the next five years, IP will take over.”

Felstead asked Lakdawala about UMI’s case in particular, and how the switch took care of the investments the broadcaster made, considering the current environment and infrastructure.

“It is complex, but broadcasters are not replacing their existing SDI infrastructure with IP. We are all considering a hybrid environment, where we continue to be in an SDI world and all the new investments we are making will support SDI as well as IP. Most of the vendors are supporting hybrid and the option to have SDI and IP together,” answered Lakdawala.

“We will have the connectivity; it’s a matter of time. There are latencies driven by machines, our connectivity will not lead to any delay”

Muhammad Methar, Senior Director – Teleport Planning, du

To this, Al Dwaik added that he plans to replace SDI between racks next year with IP infrastructure, keeping SDI contained within racks and having IP as the core switch for routing.

Al Rutu commented that most encoders and decoders do not support IP past yet. The standard for HD in an IP environment is stable; however, the problem comes with the 4K format - SMPTE 2022 is the format of the future, but it is not suitable for 4K over IP. There is a grey area for standards.

Speaking about standards, Alobidy mentioned that the two most open standards, Ethernet and Internet Protocol, are increasingly used in the broadcast environment.

“Our existing file-based system’s ingest, playout, graphics and editing are mainly based on IT, and IP connectivity. In other words, IP technology is already available, but the migration to the IP world will need to move gradually, island by island, each island with related encapsulation and de-encapsulation of the SDI signals. Both SDI and IP will have to move together side by side in a hybrid workflow environment, until IP becomes more mature and includes real-time baseband with the implementation of SMPTE 2029 and the ongoing standardisation, to tackle some of the technical issues.”

Barratt reckoned it would take at least a year to decide standards, and that it may take some time to see how mezzanine standards will shape up in live production. Kerrin interjected to say that there is no general agreement on what mezzanine format standard is.

Felstead, at this point, asked the panel about the financial aspect of compression and consumption of bandwidth in IP infrastructure. Uncompressed videos consume enormous bandwidth, and compressing them 10 to 1 or 5 to 1 will make a huge difference. Al Dwaik added that mezzanine for 4K requires compression on the switch level, which adds complexity and a point of failure. 4K needs to run uncompressed within the facility. Unavailability of standards is a key issue, pointed out Kader. Different vendors have their own proprietary standards, and equipment interoperability is lacking in this space.

“This affects our end users. Services such as Amazon video and Netflix do not reach the consumer in the absence of a robust bandwidth. Consumers are demanding more interactive services and more content on the cell phone. We cannot deliver it, because regulations and regional licensing do not support distribution of these services.”

“As an operator, we are then faced with the question of whether to reinvest in the existing infrastructure or to utilise the same, using compression standards that provide us adaptability to be able to deliver using the same or equivalent facilities operating under the regulatory norms. We have a five-to ten-year infrastructure amortisation window, but IT infrastructure is changing very fast, and therefore investments have to be made to keep up with the technology evolution.

“Despite having a FTTH infrastructure ready, we were not able to deliver HD content to our end users for more than two years, because customer end delivery systems were not ready. We still delivered SD to match customer requirements and had to gradually phase out SDI systems, moving to HD, maintaining both”

“Don’t think the majority of people will readily pay more for a 4K signal. As a normal consumer, I am not sure if I will pay more for 4K”

Peter Van Dam, Director of Technology at LIVE HD Broadcast Facilities

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**“Traditional broadcast cannot handle certain areas, such as 4K, multiple format, VOD, more content creation, where IP seems to be the only solution. Through good standardisation, IP will be adopted for high resolutions”**

Omar Alzoubi, Senior Manager - Engineering Systems, DMX

Al Buti reiterated that IP will indeed make equipment easily scalable for adding more channels. Everything comes in a packet, but the risk is in keeping it secure. Going back to the importance of setting standards, Felstead opened the post-coffee session with the question: "What do the manufacturers need to do to remain standard (such as TICO, Network Media Interface, ASPEN, V53, SMPTE 2322-6), which were discussed extensively at IBC?"

Lakdawala said that manufacturers should agree on a common standard. "If end users, broadcasters are not sure about which standard to follow. If we decide to go with Aopen, we won't know if the other vendors will support that. If they don't, then we are in a situation where we have committed to a standard not supported by the vendors. Interoperability is a problem, which is the reason the panelists agreed that these standards need to be formulated officially and agreed upon officially for fixed standards for the industry to move forward."

Felstead said that, in terms of the commercial issue that creating a standard presents to people, there is a high fee for setting standards. Does the cost of setting standards worry broadcasters?

The panel agreed that the cost is more of a problem for the vendor. As for the end user, it is built into the product. Barratt said that there have been presented standards in the SDH domain. Broadcasters around the world put their heads together and agreed with manufacturers to chalk out a set of standards that defined workflows in SDH. With changing technology, these standards need to be reviewed, and broadcasters and manufacturers need to define the same for IP now.

Are we using IP processing across the board? Are we just going to be putting all of our playground production facilities in underground data centres and worry about air conditioning?

**Data centre status**

Felstead asked if broadcasters and media companies viewed themselves as data centre owners. Barratt responded that there would be a partial transition to software-driven stuff with IP and moving content to robust and secure data centres. He said that Amazon or Google data centres would be useful and more cost-effective in the future, but one main concern for the MENA region was connectivity.

"I see a lot of progress next year, and we will see more products in the IP space. By NAB and IBC next year, there will be more developed products," Barratt said. Methar of du added that a technical crew will be on location. Al Buti reiterated that IP will indeed make equipment easily scalable for adding more channels. Everything comes in a packet, but the risk is in keeping it secure.

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“Having a blade server on the ground and a virtual machine should do this. Will combat connectivity issues.”

Kerrin said “Surely the level of bandwidth available is better suited to the purpose-built data centres. Big IT players such as Cisco and Microsoft can spend far more than we can. If I do 4K remote production, I would still pay for connectivity to my building. If that’s lowered, I will definitely opt for it.”

Al Buti raised the concern that while the idea of moving data to public clouds seems promising, government entities may not subscribe to it, as broadcasters are not allowed to save content outside their premises. To this, Van Dam said that telcos should build private clouds for broadcasters. “If I build my own cloud, it will cost me a massive amount of money. Google data centre for storage nearline will cost me much less, but the cost of connectivity will be quite high. Du promised broadcasters a data playground in the previous roundtable,” Van Dam pointed out.

**Conclusion**

It emerged that IP can make production more flexible and more cost-effective. However, broadcasters still have many concerns, including the ability of IP to deliver the deterministic performance required, the support for key features like clean-switching, and the investment levels.

There was a consensus that IP is still in infancy and needs more time to implement, though our panelists agreed that, given conducive conditions, the move could be faster. However, one major obstacle is the high cost of bandwidth in the region. Among other challenges are end user preparedness for 4K and whether viewers will be willing to pay more for improved quality.

**The Ip Roundtable raised several concerns, such as the high cost of connectivity in the region and user preparedness for 4K.**

**Image**

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Arabsat customers had a taste of the satellite operator’s hospitality at the eighth annual broadcasting forum, Atheer, in Marrakech last month. The event brought together key figures from the MENA broadcast industry for two days of presentations, discussions and networking.

Arabsat hosted its annual customer forum in Marrakech, Morocco this year, under the name of Atheer. The event brought together more than 130 Arabsat customers for two days of presentations, networking and entertaining. The presentations shared customer experiences in the MENA broadcast industry and discussed the future of satellite broadcasting in the region. A key announcement during the event was about Arabsat’s four new satellites, with the first, Badr 7, being launched in early November.

The programme opened on October 20 with a welcome note from Khaled Balkheyour, President and CEO of Arabsat. This was followed by a speech from Mustapha El Khalfi, Minister of Communications and Spokesperson of the government of Morocco, following which Amina Lemrini, President, Higher Council of Audiovisual Communications of Morocco, formally opened the event.

Commenting on Arabsat’s position as a leading satellite operator in the region, Balkheyour said: “Arabsat has extended its satellite services throughout the MENA region as well as in large parts of Asia and Europe. We have invested more than two billion dollars in developing infrastructure and rank sixth in the world as a satellite operator. “Arabsat’s latest satellite Badr 7 will be launched on November 10. We have partnered with Es’hailsat to keep 26 degree East position offering content protection from disruption, which is why Al Jazeera and beIN Sports chose us.” He also spoke about the company’s recent partnerships with EMC to launch the world’s first triple play on satellite and My-HD to reach HD quality content to 20 MENA countries at an affordable price.

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The first presentation of the day was about Arabsat – Our World Now! Your World in the Future. Nabil Al Shanti, CEO, Arabsat addresses the forum.
Vice President and CCO of Arabsat, spoke about Arabsat’s journey so far and shared insights on how the satellite company plans to integrate the MENA broadcast market in its growth path.

“The first Arabsat satellite was launched in 1985. Since then Arabsat has launched more than 15 artificial satellites. Today, our fleet includes six cutting-edge satellites in five orbital positions. We will have launched four additional satellites by 2018.

“Arabsat’s Badr satellites in 26 degrees East hotspot enable satellite channels to reach out to the Middle East, Europe, Central Asia, with focused coverage of the MENA region,” added Al Shanti.

He went on to say that Arabsat’s 13 access points throughout the world give easy access to viewers and cost-effective solutions to broadcasters.

The second panel discussion was on content development and protection. The panellists extensively discussed piracy in MENA broadcast and ways to combat it. Sam Barnett, CEO of MBC; Dr Nasser Refaat, TV Technical Services Executive, Rotana Media Group; Dr Riyadh Najm, media expert; Jamal Eddine Naji, Director General Audio Visual Communications, Amr El-Kahky, CEO, Al Nahar TV, Nabil Al Shanti, Vice-President and CCO of Arabsat, and Hanaya Botbim Atallah, Copyright Management Director, ART.

The discussion culminated in a gala dinner and awards night. The satellite operator awarded its key customers with trophies and medals for their role in supporting and growing the region’s broadcast industry. Broadcasters felicitated at the awards included AlMajd TV Network, Al Nileen Sports TV, Rotana TV Network, Al Nahar TV, BBC World News HD and Télédiffusion de Mauritanie.

On day two, Samir Safir, CEO of MY-HD, spoke about a new approach to pay-TV in MENA. This was followed by a presentation by Thomas Keene of Trio about Trio’s offerings for MENA homes. Media expert Dr Riyadh Najm presented an overview of the broadcast industry in the MENA region.

Dr Raed Khusheim, CEO of Selevision, spoke about how innovative solutions can improve the TV viewing experience for the regional audience. This was followed by a presentation by Giorgio Giacomini, Managing Director Middle East at Globecast, about distributing HD content globally.

An interview with Miflah Al Haftaa, Chairman and CEO of Saudi Media City, touched upon key topics that affect the regional TV industry, with a special focus on Saudi Arabia and how Saudi Media City is shaping the kingdom’s broadcasting future. Al Haftaa said that Saudi Media City will provide services related to high quality broadcast from recording to storage and content management. It will provide studios and post-production facilities in addition to production equipment.

Arabsat attracted senior executives from MENA broadcast.

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It was our first visit to Canon EXPO, which we are told is hosted every five years across different regions. The Paris edition was a true eye opener into how the company has explored digital imaging techniques to help professionals in various fields improve life on earth.

Our knowledge of Canon and what it does has always been limited to its consumer and professional cameras as well as its printers. It was humbling to see how the company, under the leadership of its visionary CEO, Fujio Mitarai, had taken digital imaging to new heights.

Besides their fabulous cameras, 8K projection technology and industrial printing that had us all in awe, the availability of more intensive digital imaging techniques to do a mammogram that exposes a person to less radiation and surveillance cameras that accurately gauged our age as we walked by the stand and IoT technologies for construction were fascinating. Canon’s most recently launched solutions were on display in real-life workplace scenarios, demonstrating how they are used by businesses today and what will be possible in the future.

In his keynote speech, Fujio Mitarai, Chairman and CEO of Canon, outlined Canon’s strategy as a connected world and highlighted his vision for the future to a packed EXPO audience. “I am delighted to welcome our valued partners and customers to Paris today and to explain my vision for a future Canon, where both regional independence and international collaboration is put into practice,” said Mitarai. “Over the next five years, I dream to have the Canon Management System, where each local market will have its own R&D”

Fujio Mitarai, Chairman and CEO, Canon, are building businesses to do this.” He said that Canon is geared up to make life-changing imaging technologies. “One trillion images will be taken this year, and five trillion stored. We need solutions to store and manage our memories. Our Intina cloud photo storage and photo cloud services will be used more by families.” Families will look to use the cloud more often to capture their memories, he said, and Canon was proud to say it was leading on this front. In the meantime, the EXPO itself had attendees in awe. A 250-megapixel CMOS sensor, with the world’s highest pixel count for its size, was on display at the event. When installed in a camera, the new sensor is capable of capturing lettering on the side of an aircraft 18 kilometres away, far beyond what the human eye can see.

Also showcased was a network camera with a new ultra-telephoto lens which achieves eight times the brightness of conventional lenses, making eight filming possible without infrared lighting, for the first time. A concept called Intelligent Imaging for Life, which allows people to share and print photos from an interactive table in the living room, was demonstrated. It claims to make photo sharing quicker and simpler. A range of ultra-high-definition imaging technologies for the future, including 8K cameras, displays and projector demonstrations, were on show for visitors to experience firsthand.

But the one that most caught our attention was the prototype of a machine that would make a mammogram less intrusive, paintless and more efficient.
CAIRO MAKES HEADLINES

Al Ghad Al Arabi went on air on October 20 this year after implementation consultants Galal El Hakeem and Mohammed Akhlaq were called in to establish phase two of the project. The channel was relaunched as Egypt’s first privately owned 24/7 news channel. BroadcastPro ME speaks to the consultants for exclusive details.

Al Ghad Al Arabi started broadcasting from London in 2013, with plans to set up studios and production facilities in Cairo and Beirut in subsequent years. The broadcaster built a production centre in Cairo Media City last September but the channel strategy changed from building a production centre to building a full-fledged 24/7 news channel.

The channel’s strategy was to relaunch Al Ghad Al Arabi as a 24-hour news channel where its core broadcast would come from Cairo Media City rather than London. London would still have an important role as a broadcast centre, which will also serve as a disaster recovery site should the Cairo facility suffer a catastrophic failure.

Abdul Latif El Menawy, CEO of Al Ghad Al Arabi, former head of Egyptian News Centre, was tasked with the mission to head the first private news channel in Egypt and turn it around as a pan-Arab news channel.

“The aspiration of the channel is to be amongst the big news players,” says El Menawy.

“We are aiming to deliver news with a modern and fresh perspective and to be the source of informing our viewers, not misleading them.

“This new vision had to be followed by a complete restructure and transformational programme to get the channel to be recognised as an international broadcaster. We had a very aggressive approach to re-scope, re-
The second phase of Al Ghad Al Arabi features an expanded production and post-production setup, structure and transform Cairo Media City studios to suit the new requirements, in addition to designing and building a world-class facility.

The first phase of the project was stopped and a review was carried out. In March 2015, Galal El Hakeem and Mohammed Abllaq, implementation consultants from Hi Media Pro, were asked to carry out a gap analysis of the infrastructure and the operating model for Al Ghad TV. Part of their remit was to look at the current build in Cairo and find out what was needed to enhance the facility to accommodate a full-fledged 24/7 news channel.

“Both Galal and Abllaq have been in-charge of the entire project and delivered and implemented the whole project in a very professional, efficient and timely manner. I am very impressed with the results, it was a job well done and successfully delivered,” El Menawy adds.

Systems integrator AV Solutions, which implemented the first phase, was called in to work on the second phase as well. Zaid Wattar, Managing Director of AV Solutions, says that his company worked in close coordination with El Hakeem and Abllaq to achieve the channel’s vision. The idea was to use the existing infrastructure and enhance it to allow production of 24/7 news with social media integration.

The turnaround
As the overall Project Launch Director, Galal W El Hakeem managed the entire project, while Mohammed Abllaq was the Project Launch Broadcast

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As the overall Project Launch Director, Galal W El Hakeem managed the entire project, while Mohammed Abllaq was the Project Launch Broadcast
Operations and Technical Director. The project came with a very strict timeline and budget constraints, informs El Hakeem. The real challenge, according to El Hakeem, was to deliver solutions for multiple locations in Cairo, Beirut and London while relying on existing infrastructure where possible, and solving any existing problems. The idea was to deliver a new operating model with complete integration between the three locations and centralizing everything in Cairo. Speed was an important factor to consider, as the system had to be able to ingest, create and transmit to air in the shortest possible time, points out Akhlacq.

“This needed to encourage collaborative working; it needed to be a streamlined production process to manage workflows and facilitate sharing of material with ease. As pictures are being ingested, multiple users can access these images and start to work on them in their own channel styles without impacting other users,” he adds.

The production system was upgraded from a single ISIS crate to a cluster, adding redundancy in critical areas where there was none before. This increased storage capacity built a more robust ingest and playout and improved the graphics system. A 6x2 (70”) Barco video wall that only used one Viz engine was also deployed. While designing the system, the team paid special attention to effective and easy workarounds in the event of system failure. These workarounds were designed to buy time to fix the problem, while maintaining output without affecting production quality, informs El Hakeem.

The Avid system had to be used to its full capacity with desktop editing, social media, integrated graphics and archive, using an efficient and integrated workflow. Having an integrated system with shared storage means the broadcaster can use content much more effectively. Stories generated for news and programmes, as well as breaking news content, can be distributed to all departments, which in turn have the ability to edit and repurpose stories to suit their audiences. From news to documentaries to online, all within one system, automated and streamlined publication to the web, mobile devices and social channels makes multi-platform distribution faster and more intuitive.

Desktop editing was a big concern, as it involved training traditional journalists on a new advanced file-based system, teaching them not only to produce bulletin but to edit headlines, create out of vision (OOV) scripts as well as add their own graphics. The system is designed to allow as much control of stories as possible to the journalist. A journalist can view content, edit material from headlines to OOV to full edits, add lower thirds and create headline graphics, full-frame graphics and so on, using Viz templates. In effect, a journalist can produce a complete bulletin, including content and all on-screen furniture, from a desktop. With the help of Avid’s workflow consultants, journalists were able to use the system and edit their material, including voice-over packages, after two weeks of training.

“I believe the key was thorough training and a strict adherence to the prescribed workflow,” says Akhlacq.

By integrating Media Distribute into workflows, journalists can automate and streamline publication to the web, mobile devices and social channels, making multi-platform distribution faster and more intuitive. It provides a single interface within iNEWS or Interplay to create and deliver content to any selected destination platform.

This leads on to a centralised storage and archive area. Once again, the vast array of material is available for all to use, thereby enriching output. Having a single archive policy simplifies searches and reduces duplication, in order to manage the archive library effectively. SGL installed and configured applications

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“We are aiming to deliver news with a modern and fresh perspective and to be the source of informing our viewers, not misleading them”

Abdul Latif El Menawy, CEO, Al Ghad Al Arabi
remotely and all training was also delivered via the web. Spectra Logic sent an installation and configuration engineer to deliver the relevant training.

**Graphics and video wall**
The Vizrt graphics systems had to be retained, but significant changes were made in the system and workflow, to enhance and improve on what was built previously. "We installed a fully redundant Graphics Hub and Content Pilot servers, which did not exist in the previous system that lacked redundancy," says Akhlaq.

Viz Maps were previously a standalone engine and did not fit the needs of an agile news environment. There were upgraded to a real-time maps server and allowed news producers and journalists to create maps on their own from templates, without depending on the creative team. "We also installed a Barco video wall, but rather than have a Viz engine driving four cubes, we used an E2 controller and a Viz Multiplay engine to save time and money, with one engine instead of three," Akhlaq explains.

Viz Multiplay is based on new engine capability and allows a single Viz engine to provide up to eight DVI video outputs. Traditionally, it was only possible to get one output from each engine, and a complex video wall needed multiple engines. With eight outputs from one engine hardware, the resolution from one engine can be up to 4K. Another advantage of Multiplay is that it is web-based; it can run from any desktop, and can be controlled via touchscreen or even from gallery or studio floor on a tablet.

**Video over IP for contribution circuits**
The internet and telecoms infrastructure in Egypt is still developing, and bandwidth remains a challenge. Akhlaq decided to use VoIP from London to Cairo at Al Ghad, based on the fact that Nilesat already uses this technology to send material to its playout centres, with a high degree of reliability. "This will save considerable cost, as it uses new technology on the public internet in a secure manner. The challenge we faced was placing the right folder at the receive site, where Vantage would transcode the file and place it in the right folder in Avid. This process is automated using watch folders," Akhlaq adds.

**"The real challenge was to deliver solutions for multiple locations in Cairo, Beirut and London, while relying on existing infrastructure where possible, and solving any existing problems"**

Galal El Hakeem, Launch Director, Al Ghad Al Arabi

"The challenge we faced was to match the encoders in London to the decoders at Nilesat. Throughput of information was difficult but once we got through we were impressed with the results. We installed a fully redundant Graphics Hub and Content Pilot servers, which did not exist in the previous systems that lacked redundancy," says Akhlaq.

Mohammed Akhlaq, Consultant, Al Ghad Al Arabi

"Change in management and transformational change within an organisation is challenging, but relaunching a channel while dealing with training and a limited skill set of staff was harder. Having worked in the region and understanding the culture helped to overcome the resistance we faced. By holding regular meetings with teams and offering open forums to help understand their concerns, we listened and adjusted our approach to achieve the desired results," El Hakeem concludes.

**Challenges**

Importing equipment into Cairo was not easy. The recruitment and training of more than hundred editorial staff also proved to be challenging, as they had to be trained to use Avid. "Change in management and transformational change within an organisation is challenging, but relaunching a channel while dealing with training and a limited skill set of staff was harder. Having worked in the region and understanding the culture helped to overcome the resistance we faced. By holding regular meetings with teams and offering open forums to help understand their concerns, we listened and adjusted our approach to achieve the desired results," El Hakeem concludes.

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BroadcastPro ME hosted its second Broadcast Masters Cup at Emirates Golf Club in Dubai last month. Industry specialists spent the afternoon on the course playing an 18-hole round. The event culminated in an after-game party with networking and dinner. We bring you snapshots.
The PXW-FS5 is Sony’s newest offering to the market and I had the chance to test it out. Straight out of the box, it’s impressive. It has a compact, lightweight body, a top handle that fits snugly via two quarter-inch threads, an LCD that is easily adjustable and mounts on the side and a handle grip similar to big brother, the Sony PXW-FS7. This handgrip can be set to varying angles for the shooter’s comfort.

Sony’s latest camera release, the PXW-FS5, launched at IBC this year, is a smaller, sleeker version of the PXW-FS7. Our resident DoP Harvey Glen tests the camera to find out if it lives up to the benchmark set by big brother, the FS7.

The FS5 takes the standard Sony batteries that have been around for decades, handy as most people have built up a collection of these over the years, and records to an SD card or micro SD within an SD converter. So it’s small, lightweight, quick and simple to set up. So far so good.

There’s been a lot of chat about the FS7 and it’s had very positive reviews. Its smaller counterpart, the FS5, has the same sensor, the 4K Super 35 Exmor CMOS. Now
On the side of the camera, you can flick a switch from exposure to ND and then control the ND via a scrolling function (same as exposure control) from 1/4 to 1/128 increments. For me, this is awesome. It’s incredibly high and means you can confidently shoot in low-light situations. The Sony A7T has become known as the low-light camera of choice, but that’s still packaged in a stills camera body and requires priming to make it operational in the filmic world.

The Sony FS5 is packaged as a video camera and the fact that its native ISO is 3200 is great news. As you’d expect, it is very clean. Once I pushed it up to 6400, I did notice some noise, but having the ability to record at such a high ISO still allows you to capture footage which was previously unobtainable without lighting.

The best thing about the camera for me is that it has built-in ND filters, but not just a single function of ND. It has two modes. First a standard wheel with four-setting increments via digital stops of ND, which, you have further control to get the exposure/stop exact using the incremental ND – 1/64. It means you can retain as much information as possible in the picture, as once you’ve shot a shot, you are normally so hyped to get the exposure/stop exact, that you want to watch it back immediately afterwards. I’m cool saving it, and you cannot shoot directly to buffer and play back, essentially it’s a technology that records to S-Log3 and S-Log2 so you can retain as much information as possible in the picture. This double faders and colour shift. This double ND solution makes using high ISOs like 3200 very practical. The FS5 has the option of recording to S-Log2 and S-Log3 so you can retain as much information as possible in the picture, this function is very useful if you intend to professional grade the footage in post. Of course, when shooting the footage, it will look low in contrast and potentially scare any clients uneducated in the matter. To counter this, there is a Gammen Display Assist option, which will apply a Rec 709 LUT (look up table).

There are varying Gammen options in this camera that people familiar with Sony will recognize. So by no means do you only have to shoot in log mode and then grade.

Resolution

The resolution of the FS5 doesn’t disappoint. You can record in 4K – yep, that number again, 4K. The mode is QFHD 3840x2160 at 25fps and either 400 or 1000Mbps in XAVC. Incredibly, it can also shoot high frame rates in XAVC 4:2:2 10bit with no sensor cropping to 240fps for eight seconds. I know this will get loads of people super excited!

You can set the camera to start or end trigger. I found the end trigger very useful. This means you cut once you’ve got the shot, so there’s no wasted footage. However, you do have to wait for the recording to buffer and play back, essentially saving it, and you cannot shoot immediately afterwards. I’m cool with this, as once you’ve shot a slow-motion shot, for instance, a skateboarder performing a trick, you are normally so hyped that you want to watch it back immediately anyway. It’s a small price to pay for such a function. In full HD, you can shoot 120fps for 16 seconds, and in HD a whopping 480fps for nine seconds. I know people will have all sorts of fun with this.

So to round up, this is a very light 0.8kg camera body, with the ability to record 4K internally at 100mbps. You can crank the camera to super high frame rates at quality resolutions. With its base ISO of 3200, it’s very capable in low-light situations and good for night shoots. It has the option of S-Log. Sony claims it has 14 stops of dynamic range – I never quite believe the number of stops, but it has a lot.

Everything is at your fingertips and easy to adjust. Like a real video camera, it has all the user functions, from zebra to peaking, expanded focus, SDI and HDMI out, 24 XLR inputs, all you’d expect from a professional camera. It records to cheap and easy-to-find SD cards.

The camera comes with the Sony A mount, but you can add a lens adaptor or a speed booster to change it to Canon EF, if you prefer. The handgrip is easy to use and set to the operator’s preferred position. The camera aesthetically looks cool and is way less bulky than the FS7. The LCD is a decent resolution. It could definitely do with a sun shield, and it’s a shame Sony didn’t build one into it. But third parties will sell them or you could make your own.

So what’s not to like? I hate to say it, but not much really. The Canon C300 has reigned for many years now, but I think Sony has finally come up with a camera that will challenge it, as it’s a unique and highly capable tool. I’m sure it will quickly find its way into cinematographers’ hands globally!
With the fast pace of technological advances, people's consumption patterns of content are changing. This requires content providers to cope with a new digital lifestyle, driven by smart gadgets, wireless internet and content consumption anywhere, anytime. Content is now best made available on demand over the internet, in order to dovetail with consumers' lifestyle.

Over the internet, in order to best make available on demand, internet and content consumption driven by smart gadgets, wireless cope with a new digital lifestyle, This requires content providers to patterns of content are changing. With the fast pace of technological advances, people's consumption from this survey. While some of the key findings from the survey:

- FTA channels with online streaming services. Since September 2014, almost half of the free-to-air (FTA) channels that broadcast from the MENA region provided content online, be it live-streaming, on-demand streaming or both. This has been driven by the ongoing deployment of new internet technologies in the MENA. The novelty of watching TV may never fade away – the thrill of seeing the last-second goal make its way into the net, the moment a reality competition show winner is announced, or watching live news events as they unfold. One thing is for sure: TV viewership is changing.

- Telecom operators in the MENA region have recognised user behaviour and subsequently offered their own mobile TV services with a variety of channels and content, ranging from Arabic- and English series to movies and video clips.

- The broadcasting culture is changing by the day and more channels are embracing the internet and acquiring training for new products and solutions, in order to integrate their conventional broadcasting experience with the digital world.

- Many broadcasters are still lagging behind in embracing digital media, as the demand in home markets is limited. However, they are exploring new avenues, with an increase in content demand from the Arab diaspora outside MENA, such as For Echorouk News (Algeria), whose main driver behind providing digital content was the constant demand by viewers in Europe to watch the channel's content through the internet because it is not available on Eutelsat.

- Tunisia came first in readiness for convergence in the Maghreb and tenth in MENA. With its internet affordability and channels embracing the internet, Tunisia scored 65.5% on the Readiness for Convergence Index. Tunisian TV channels have embraced the internet in order to keep up with technology and to target different segments of society, specifically the youth segment, whether through direct internet access or apps. Maghreb 24 TV, for example, has its own development centre to develop apps on both Android and IOS. Maghreb 24 notes that people tend to watch TV through conventional methods at night but consume digital content more during the day.

Top five countries by readiness index: Qatar: 88.2%
- Qatar is thriving in the ICT sector, making it one of the top countries in the MENA; it is considered one of the most developed and fastest growing countries in ICT. Furthermore, Qatar is home to one of the most important news broadcasters in the Arab world, Al Jazeera. Qatar has 22 television channels, all of which offer online streaming. The launch of Al Jazeera satellite channel, with the aid of its specialty pay TV sports channel beIN sports, brought Qatar's radio and television sector into the limelight. Viewers

FTA channels offer online streaming and video features

FTA channels don't offer online streaming and video features
in the region are accustomed to getting their entertainment in the air and don’t mind getting pirated and delayed version content, but when it comes to sports, the value of the content dominates dramatically as soon as the match is over. That is why users pay – to get their content as soon as it happens. Aside from beIN’s traditional packages, it offers packages as soon as the match is over. That is why users pay – to get their content as soon as it happens.

All factors considered made it no surprise that Qatar is at the forefront of convergence readiness. This small peninsula in the Arabian Sea is continuously improving its infrastructure and is keen on providing new technologies to its market. With the infrastructure ready, the channels all online, a strong economy and significant media broadcasters, Qatar scores 88.2%, the highest on the Readiness for Convergence Index among the analysed countries.

Kuwait: 87%
Kuwait’s media scene flourished to 20 channels, seven government owned and 13 private. To meet the demands of the 57% of internet users in Kuwait, 60% of channels offer some form of online streaming. Following Qatar, Kuwait is second in readiness for convergence. With high technology levels, high income levels, operators and broadcasters that offer online content and government policies that encourage the deployment of technologies make Bahrain’s future in convergence bright, scoring a high 86.8% on the Readiness for Convergence Index. While the only two channels that don’t broadcast online are government entities like the Bahrain Radio and Television Corporation. The other three government channels have gone online because of high demand from people wanting to share content, especially political, on social media.

Saudi Arabia: 85%
This leading country in terms of internet penetration rate, with the most updated internet technologies and financial clout in Saudi Arabia. It came fourth, scoring 85% on the Readiness for Convergence Index. With a large section of the population able to afford internet, Saudi Arabia has the highest internet penetration rate among the MENA countries, at 63.26% in 2014. Moreover, internet consumption is very high in Saudi Arabia.

According to Mobily, people aged between 15 and 25 (millennials) consume an average of 5GB per month through their mobile devices alone. The reason behind adopting higher internet bandwidth, in Mobily’s opinion, is the heavy consumption of YouTube and online games.

TV channels in Saudi Arabia are starting to realise the importance of going online and leveraging the internet, not only through their websites but also through social media. Ijara, an OTT platform, for example, has used social media to attract a new audience to its website and monetise digital content.

With over seven million likes on Ijara’s Facebook page, there is an increase in the number of viewers of the channel, which resulted in the growth in revenues. In addition to leveraging YouTube to host content, Saudi Arabia’s channels also focus on launching their own apps, which keep people directly connected to the channels and updated with all the news. For the Saudi channels, the targeted viewers through digital content are the millennials and people in their thirties. Conventional television is still the way of consuming content for older viewers.

UAE: 84.1%
The country scores a total of 84.1% on the Readiness for Convergence Index, fifth among MENA countries. The UAE is one of the most developed and fastest growing countries in the region. Its advanced infrastructure allows relatively high levels of adoption of digital content and IPTV technologies. Home to a number of international networks as well as pay TV providers, the UAE is a key player to influencing media in the region. The high level of adoption of digital content encouraged broadcasters in the UAE to embrace the internet. By September 2014, the UAE had a total of 94 channels broadcasting free-to-air, with 56 channels providing content online. Moreover, the UAE is home to two of the most important players in the pay TV market: OSN and My-HD.

While issues relating to the quality of broadband did arise, OSN went online in mid-2014, choosing a time when the majority of countries had relatively good internet access. Furthermore, the network has launched an app specifically designed for online viewership, at low cost and without a contract, to attract viewers and subscribers.

“There is an immediate need to preserve, archive, digitise, optimise and manage these assets effectively so that these could be brought to the viewers. Quality content is always in demand, and therefore it offers a great opportunity for monetisation”

Sanjay Salit, MD, MediaGuru

For a network like OSN, there is a high rate of digital content adoption among viewers, with more viewers choosing online platforms.

My-HD, launched in May 2013, looks at a completely different market segment. The network is the only pay TV provider in the region that does not offer online streaming. According to exports, 90% of MENA homes don’t have fixed broadband, and 98% don’t even have a fixed phone line. If TV and internet are going to converge in the coming years, then it has to happen via mobile broadband. But mobile broadband is unaffordable in low-income countries. Consider the sort of bandwidth and data plans required to watch high-definition TV for a few hours daily. People usually watch three or four hours or more of TV daily. To be able to do that for 30 days in a month, one would need about 100GB of data for BD, less for standard definition, but still far beyond the data limit of any plan that is affordable by the majority of users.

Manufacturers/vendors:
• Operators in the MENA region have recognised user behaviour and subsequently offer their own mobile TV services with a variety of plans and content, ranging from Arabic and English series to movies and video clips.
• As mobile broadband penetration increases, so too is the adoption of mobile TV. Communications report, broadcasters, service providers and content owners are moving rapidly towards convergent platforms, because they provide real operational efficiency and make it possible and practical to deliver services to the broadest range of consumers, however they choose to watch.
• Grass Valley claims that broadcasters are looking at both quality and price equally, although they sometimes sacrifice features for price.
Palestinian-American filmmaker Mai Masri’s 3000 Nights, which premiered at the Toronto International Film Festival (TIFF) last month, has been touring film festivals around the world ever since. The film opened to much acclaim at Busan International Film Festival and BFI London Film Festival, having been described as a poetic, compelling and raw allegory for freedom under occupation. 3000 Nights struck a chord with audiences for its moving account of life in a Palestinian prison, making prison into a metaphor for Palestine under occupation. “Both screenings were packed,” says the Palestinian filmmaker of the film’s Toronto debut. “The Toronto premiere was crucial in determining how the film would be received by an international audience. It was also a celebration after a long and arduous journey.”

3000 Nights was inspired by the real-life story of a Palestinian woman detained in an Israeli prison who gave birth to a baby boy there. Meeting her made her story no longer distant but something Masri could sense and feel. “I found her story very touching, so I decided to meet other mothers who had given birth in detention. Their stories hit a deep chord within me, especially since I had recently become a mother myself. I discovered a fascinating world and a story that needed to be told,” says the filmmaker.

The film amalgamates the rawness of a documentary with a poetic aesthetics of the prison experience itself. There are many instances in the film when real life crosses over into an imaginary world that lays bare the inner world and thoughts of the characters. Although the film is shot in an old military prison with thick concrete walls and rusty iron bars to keep the setting as real as possible, the filmmaker does take creative liberty to add a new dimension to the scenes and give her characters more depth. “I wanted to capture the magic of the moment, like in a scene where the wooden bird turns into a real bird, and the various time lapses, passages of time and change of seasons,” she says.

The film is not a documentary, but rather a dramatised account of life in prison, according to Masri. “We shot with a handheld camera most of the time. I wanted to give the images a raw cinema verité edge that would accentuate the hardships of the prison experience. I also used documentary footage at the end of the film to tie my
story to the actual events. We also decided to frame the actors through the bars whenever possible to accentuate the feeling of confinement, and to go for a de-saturated look with high contrast and deep blacks; colours and warmth would come from the flesh tones of the actresses.”

The film was entirely shot on location in a military prison in Zarqa, near Amman in Jordan, with no studios. Filming in an old military prison helped the actors stay close to reality. The shoot took a little over a month, pre-production took around three months and post-production took another four months.

Although Masri started working on the script in 2010, she admits that serious writing began only in 2012. “The people at Enjaaz saw the rough cuts of the film, liked it and decided to support the film with a co-production grant.”

During pre-production, production designer Hussein Baydoun and his team flew in from Beirut and set up camp in Zarqa. The Jordanian army gave the crew permission to repaint the prison and build new partitions. In the meantime, Masri worked with the actors and developed their characters along with them. DoP Gilles Porte was also very closely involved in the film’s visual approach. Masri and Porte together planned the use of colours, lighting, contrast and movement to enhance the look and feel of the film.

The film was mainly shot on the Sony F55 using a RAW recorder. Porte used Angénieux Optimo zoom 28-76mm lenses.

The lights were placed high up on the ceiling to avoid any hindrance to the actors. HMIs and Fresnel Tungsten lighting were the main lights used in the film. Porte cleverly used sodium lights used in prisons to create a contrast with the cold blue lighting.

The shoot was completed in 34 days, after which editing began. Masri worked closely with Beirut-based editor Michele ‘Tyun, with whom she has worked on several previous documentaries. “Michele ‘Tyun has a keen sensitivity and understanding of the subject and the spirit of the film. Editing with her gave me a chance to take a fresh look at the material and bring out the best in it. Altogether, we edited for four months. I then worked with my sound designer Rana Eld in Beirut to create the sounds that would bring the prison to life. The soundtrack added an important dimension and worked like music for the film, bringing in emotion, drama and intensity,” explains the director.

Sound recordists Chadi Rukos and Raja Dubayah focused on recording the direct sound of the
actors as well as the ambient sound of the prison, to make it more authentic and not rely on post-synchronisation.

The sound recording was done on a mix of shotgun Sennheiser,anken microphones and wireless neck microphones. Well-known sound mixer Florent Lavalée and his team did the sound mixing for the film in Paris.

“There was a lot of echo, so we used blankets to cover the ceiling and the ground. We tried to capture the natural sounds of the prison such as chains, handcuffs, keys, doors opening and closing, loudspeakers and so on.”

The main issues were raising funds and operating with a small budget under difficult conditions, says the filmmaker. Working with a large cast with a mix of actors and non-actors and managing scores of extras was another challenge. The film features 18 actors, predominantly women. Some are established actors from Palestine and Jordan, but many are non-actors appearing in front of the camera for the first time.

“I had decided to shoot long sequences, so every movement had to be highly synchronised. The biggest challenge of all was working with a two-year-old child. We didn’t have a professional coach. We had to get him used to the prison and to Layal, who was playing his mother in the film. In Hollywood, they say never to work with children or animals. I did both! With patience and good luck, we were able to get the desired results in both cases. The bird scene, for instance, was truly magical, we didn’t have to resort to special effects to bring the bird to life,” says Masri.

“Many of my actors and crew had either been in prison themselves or had a family member who had been in prison. Almost 20% of Palestinians have been detained in Israeli prisons at one time or another. I wanted them to bring this personal experience to their acting.”

Masri affirms that Palestinian cinema is on the rise despite minimal funding and resources.

“Palestinian filmmakers are expressing themselves more and more with minimal means, using small digital cameras and even cell phones. There is a trend to do more quality work exploring the aesthetic and creative boundaries. This year alone, there have been Palestinian films running in the official competitions of the major film festivals such as Cannes, Toronto and Berlin. Palestinian cinema has helped bring Palestine into the hearts and minds of people around the world,” comments Masri.

3000 Nights will be theatrically released in Palestine and Jordan in mid-December, and then in several other countries around the world.
The proliferation of digital radio platforms worldwide is making more choices and better quality a reality for listeners, as the streaming model continues to evolve. Audiences can access more streams on more platforms today than ever before, and enjoy a richer media experience through metadata-driven enhancements. Rather than watch a straight-line player audio and real-time metadata integration in the broadcast space – and for good reason. Flash reliably supports real-time, in-stream metadata that triggers other player events. For the broadcaster, this is important when it comes to switching ad banners on the player or triggering in-stream ads. Flash can read metadata in the stream and react accordingly. However, Flash has plenty of shortcomings when it comes to the user experience. First and foremost, Flash is not supported on every platform. For example, XIS does not support it, meaning there are no Flash streams on iPhones or iPads. Flash streams are also not supported on most other mobile devices – a big hole given the millions of Android users in the consumer space. Mobile device manufacturers have put this restriction in place due to the exceptionally high resource usage of Flash. Security exploits are another downside to Flash, driving software developers and mobile-device suppliers to abandon ship. Flash works on a plug-in-based architecture that interfaces with the web browser. That plug-in permits a specific set of actions that enables the content to play within the Flash wrapper. The architecture’s side-effects mean bugs and vulnerabilities occasionally have a drastic security impact. Adobe does an excellent job of patching bugs, but the plug-in architecture requires the consumer to continuously – often manually – update Flash plug-ins. The number of exploits and vulnerabilities in the format has soured much of the software development community. The struggle is that Flash continues to provide excellent functionality for the broadcaster, but shortchanges the consumer. For the broadcaster, Flash plug-ins can read in-stream metadata in real-time from the audio stream. This ensures that the metadata is updated in the player from the same network connection the audio stream uses. This eliminates the need for a duplicate connection for metadata, eliminating latency and synchronisation issues. Changes to artist/title and other data within the stream are instant. However, if the consumer cannot play the content – or worse, continuously struggles with software updates and security patches – the arguments to retain Flash-based media players quickly thin. This has paved the way for HTML5-based media players, which are proving a desirable alternative to Flash players. HTML5 is the latest evolution of the standard that defines HTML and is designed for use by all open web developers. Audio and video elements are easily embedded, and it supports the manipulation of dynamic multimedia content. This opens a new avenue for developers and consumers, as it has broad

"Metadata management and integration is necessary to evolve the broadcaster’s online business model and to attract, retain and grow radio audiences and advertisers”
Andrew Jones, Director of Sales Engineering, StreamGuys
"For consumers, HTML5’s lack of an external plug-in enables native, secure playback of audio streams within any web browser."

Eljah Atkinson, Technology Developer, StreamGuys

There are a few workarounds for solving the HTML5 in-stream metadata problem, with some more effective than others. Some players attempt to solve the problem through a duplicate connection to the stream. This architecture provides one connection to the stream for decoding the audio, and a separate connection to acquire the metadata.

The process uses Javascript, client-side audio decoding to discard the audio and retain the metadata, which is a heavy burden on client-side resources. The duplicate connections also double bandwidth usage. Metadata scraping is a more efficient approach. This server-side utility establishes a single connection with the live audio stream solely for the purpose of collecting stream metadata. Compared to the player-side duplicate connection strategy, metadata scraping significantly reduces bandwidth usage to minimise network load.

The terminology represents the process of ‘scraping’ the metadata out of the stream, establishing one connection that all players use as the source for metadata. There are two ways client applications can get metadata from the server-side scraping utility by polling and pushing. Polling is the more prevalent. In this technique, the browser, socket connections ensure users can automatically push and pull data between the server-side and the web browser. This also eliminates the need to poll the server every few seconds. This has a significant monetisation benefit for broadcasters. For example, the persistent connection enables a tightly coordinated, synchronised banner ad display alongside in-stream ad insertion—a much trickier endeavour in a short polling scenario.

It has the added benefit of pushing these same metadata changes to third-party platforms such as TuneIn, with the appropriate API integration. Regardless of the method chosen, metadata management and integration is necessary to evolve the broadcaster’s online business model and to attract, retain and grow radio audiences and advertisers. It is an ideal time to talk to your CDN to learn more about the options and possibilities for delivering a richer, more dynamic streaming experience that will better monetise your efforts.

The TOP 50 COMPANIES YOU NEED TO KNOW has all you need to know about the top players in the region’s broadcast and satellite market. A compilation of profiles of 50 broadcast and satellite companies in the GCC, the hardback coffee table book is a valuable resource for not only business entities but also customers looking for a ready reckoner of key industry players.

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The column is authored by Andrew Jones, Director of Sales Engineering, and Eljah Atkinson, Technology Developer at StreamGuys.
Today, there’s a wide range of opportunities for content discovery on digital platforms, whether it’s through over-the-top services or media companies, further empowering viewers to consume what they want, when they want, and how they want it. This is especially true in the Middle East, where 3G/4G handheld device adoption is growing at breakneck pace. In tandem, content consumption is exploding. More than 14 million hours of content is consumed on YouTube every day in the MENA region, second only to the US in terms of average viewing time per viewer.

Ericsson’s recent ConsumerLab TV & Media UAE Report shows that 37% of consumers in the UAE want to be able to watch content on any device they choose. The research states that UAE residents watch an average of 4.7 hours of video content on their smartphones per week at home. Media companies have begun leveraging the web to distribute original or syndicated content with services such as OSN Play and icflix, and in doing this, the lines between content producers, distributors, broadcasters and technology companies have been blurred.

“Media companies have begun leveraging the web to distribute original or syndicated content with services such as OSN Play and icflix, and in doing this, the lines between content producers, distributors, broadcasters and technology companies have been blurred.”

Media companies have begun leveraging the web to distribute original or syndicated content with services such as OSN Play and icflix, and in doing this, the lines between content producers, distributors, broadcasters and technology companies have been blurred. Companies that deliver content are now producing it. Production companies are getting into delivery. And pure technology companies want to be distributors. One thing is clear, however: media companies have to continue pushing content to people in order to maintain market share. Doing this sustainably over the long term requires flexible and scalable integrated solutions. For this, media companies need to work with a specialised partner. To be able to address a growing global audience, media companies have to work with partners that offer the full gamut of distribution services, including premium video delivery services over fibre, satellite broadcasting and video-focused content delivery networks (CDN). These partners also need to enable media companies to transfer large volumes of media from production locations to remote facilities, distribute digital assets, offer a selection of proven distribution channels, be able to assist them in addressing multi-screen delivery requirements and be able to integrate with and broadcast live events. It is imperative to make content available in multiple formats, in a digital repository – such as a private, public or hybrid cloud – that’s accessible globally, anytime, anywhere. The ability to quickly deliver quality content, whether in the current HD/full HD format or next-generation 4K format, is critical to media companies. In the past, satellites and production houses deliver video content flexibly and cost-effectively to media hotspots worldwide. With on-demand and customisation capabilities, media personnel can deploy specialised feeds based on location and time zone.

Content management, delivery and broadcasting in today’s dynamic technology-driven world is a challenge, but it is one that can be overcome with the right infrastructure, the right delivery platform and state-of-the-art solutions.

Radwan Moussalli is Senior Vice President – Middle East, Central Asia and Africa at Tata Communications.
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