ASBU CLOUD STRATEGY LEVELS PLAYING FIELD FOR MENA TV & RADIO

ITWORKSME TAKES REGIONAL PLAYERS ON OTT JOURNEY

Tunisia and Lebanon empower MENA broadcasters with new age technologies

ARAB INNOVATORS
For a quiet month like Ramadan, a lot has been going on in the TV industry—and I believe a lot of the ruckus has to do with the World Cup. The fate of Germany and Argentina hang in the balance as I write this. But the drama on the field is vying with the uncertainty playing out on our screens primarily because of issues centring around beIN Sports having the exclusive MENA broadcast rights to the 2018 World Cup. Egypt’s defiance of these rights and the desire to run 22 free matches brought a very pertinent question to the fore. Should the rights for a tournament like the World Cup be vested with one sole player in the region? Should there be a greater collaborative effort between governments to share the broadcast rights as well as the investment that goes into them?

The larger concern is the rampant piracy the games have unleashed across the region and even globally, driven by eager fans willing to watch the soccer spectacle at any cost. With little appetite to clamp down on illegal set-top boxes, channel owners will continue to question the economics of vying for broadcasting rights for sporting events.

Amidst the World Cup frenzy, we have a story that should inspire confidence and belief in the long-term health of the MENA broadcast industry. The Arab States Broadcasting Union (ASBU) has announced unfettered access to a features-rich cloud for all member broadcasters in the region. On the sidelines of the annual ASBU TV and Radio Festival in Tunis, I had the opportunity to speak with ASBU Director General Abdelrahim Suleiman at length about this bold new initiative. We have more industry initiatives within this issue that will tell you, World Cup fracas aside, the region’s broadcasters are making some seriously good moves.
Annual Event

The BroadcastPro ME Summit & Awards is our annual flagship event to promote and celebrate excellence in the broadcast and satellite industry across the MENA region. The event features extensive networking opportunities, seminars and awards presentations by key industry and government leaders.

The Summit

The summit creates an engaging platform for MENA TV, film and radio professionals to discuss and debate the most pressing topics and trends in the market.

The Awards

The gala dinner and awards ceremony brings together the industry to celebrate excellence in the MENA broadcast and satellite industry.
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July 2018
AJA expands its openGear line with five new openGear cards, including DashBoard software support for configuration and control. Designed for use in openGear 2RU frames including AJA’s OG-3 2RU frame, AJA’s new openGear cards combine the reliability and functionality of AJA Mini-Converters with the high-density openGear architecture. New DashBoard Software support provides convenient and industry-standard configuration, monitoring and control options over a PC or local network.

5 New openGear Cards

A special economic package and a new series of initiatives from Abu Dhabi will enable entrepreneurs to start their businesses from home and free zone firms to operate with a dual licence. The initiatives are aimed at accelerating economic growth within the media sector over the next three years. The announcement was made with the approval of HH Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, Deputy Supreme Commander of the UAE Armed Forces and Chairman of Abu Dhabi Executive Council. Clarifying further, HE Maryam Eid AlHmeiri, CEO of Media Zone Authority – Abu Dhabi and twofour54, said: “We have extended our entrepreneurship scheme to enable more of our small businesses to work from home in the first two years as they get their businesses off the ground. We have [also] recently offered a dual licence to partners in the media zone to enable them to work with onshore companies and government entities.

At the media zone, 37% of our partner base are owned and operated by Emiratis who feel the need to be part of a creative community. We have a 13,000-strong Arabic youth community and the plans announced to create 10,000 new Emirati jobs present exciting opportunities for our community and private sector media companies.”

Malek Akkad on restoring The Message in 4K

After a 40-year ban in the Arab world, Moustapha Akkad’s The Message, which chronicles the life and times of Prophet Muhammad, had a theatrical release in the GCC, including Saudi Arabia with more releases planned across the region. In conversation with BroadcastPro ME, Malek Akkad, one of the famous directors, recounted the painstaking process of 4K restoration, which he described as a “labour of love.”

“The restoration was an expensive process to undertake, but I am preserving my father’s work,” he said. Significant elements of the restoration included making the colours more vibrant and moving from Dolby Stereo to 7.1 surround sound.

Perhaps the important part was that the negatives for The Message were in good shape, barring a couple of scratched frames that we had to go over and repair digitally.

“The process was painstaking nevertheless. You are talking of 44 frames a second. This process of checking each frame was outsourced. With a lot of different eyes, you believe the frames were studied in detail for any flaw after the initial 4K scan of every frame. While sound design and mixing was done in Hollywood, colour grading was done in London.”

Malek Akkad and Mohamed Al-Sadiq, restored versions of The Message.
Multinational Dubai crew produces Louder

Film production company Pi Events & Productions announced last month the completion of English feature film Louder, a romance based in Dubai and slated to be released on 14 September. Written and directed by Dubai-based filmmaker Jacques Brown, the independent film is sponsored by a host of local companies, with Icon Art Production, Peel Productions and Red Monkey supplying equipment. Dubai Film TV Commission (DFTC) reportedly provided critical support in acquiring permits. The film, shot by DoP Shane Cairn, follows self-made millionaire Killian, who takes a vow of silence following a tragic event. The vow is disrupted by 12-year-old Zoe as she forces her way into his silent world with her larger-than-life persona while struggling to find her own voice in a world dominated by her mother’s fame. Speaking to BroadcastPro ME about the cast and crew, producer Simran Madaan said: “We had an incredible mix of nationalities, more than 40 people from all over the world – Irish, Emirati, Indian, Filipino, Belarusian, British, Egyptian, German, American, Canadian and Colombian, among other nationalities.” (Giving an overview of the timeline, Madaan said: “We started putting the team together in January 2018. The first day of shoot was 28 April and we wrapped the shoot on 31 May.”)

Nat Geo Kids Abu Dhabi acquires content from Ukraine’s MK Distribution

MK Distribution, part of Ukraine’s MK Media Group, announced last month the latest purchases from its content catalogue: Nat Geo Kids Abu Dhabi purchased entertainment programme Who’s There?, which was released in early 2018 and produced jointly with Sveja Production. The Ukrainian animated show for both kids and adults consists of 13 stories about different countries with facts, sometimes funny, about their history. Discovery Networks Asia-Pac picked up Mouse Science for its Central and South Asian territories, as did Czech Republic TV.

GatesAir expands global team

GatesAir CEO Bruce D. Swail has created five key executive-level management positions aimed at maintaining global revenue growth and profitability, coming on its most successful quarter to date. Rich Redmond becomes President, GatesAir. In his new role, Redmond is responsible for go-to-market, product, and M&A strategies for the APAC, EMEA and CALA markets, with all of these regional sales teams reporting to him.

OSN forges partnerships with Zain Iraq and VIVA Kuwait

Dubai-based VoD platform, Wavo, has announced partnerships with telecom operators VIVA Kuwait and Zain Iraq, to provide their respective customers access to the video streaming platform. Under the deal, VIVA Kuwait customers are eligible for a one-month free trial of Wavo. The OSN deal with Zain Iraq is the first for OSN in Iraq. Zain Iraq’s customers can sign up to an exclusive bundle offer containing 20GB of data and all-inclusive access to Wavo.

Vista solutions deployed in KSA cinema venues

Vista Entertainment Solutions, a Vista Group company, has deployed the Vista Cinema software suite in the first Saudi Arabian cinema venues and has become the first cinema management software providing integrated reporting to the General Commission for Audiovisual Media (GCAM) portal. Vista Entertainment Solutions reportedly supported AMC Entertainment and the Development & Investment Entertainment Co., a subsidiary of Saudi Arabia’s Public Investment Fund, in opening Saudi Arabia’s first commercial cinema hall earlier this year. The company has an estimated 38% global market share in the Large Cinema Circuit market. Vista Cinema is headquartered in Auckland, New Zealand.

Deluxe Middle East to relocate to twofour54

Director Middle East, SVP – Media Cloud, has relocated as part of the company’s efforts to be closer to the capital’s large talent pool while also being close to most of the big productions in twofour54. “We are looking forward to working more closely with the twofour54 team on productions in Abu Dhabi and as a result, growing our respective businesses and markets,” Wallis told BroadcastPro ME. “By setting up at twofour54, we will also have access to the huge pool of more than 500 freelancers based there, who can support us with all of the services we need, from content production to broadcast services.”

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**Faran claims success with Zone 0**

Dubai animation house Fanar Production, which had success with its Ramadan programme Shaabiat Alcartoon in previous years, has found equal success with its 2018 debut, Zone 0. The new launch was the second most watched programme in the first two weeks of Ramadan, according to IPSOS, after Ramez Taht Al Sefer on MBC 1. Zone 0 is an animated production that discusses social issues and is aimed at the 17+ age group. The title refers to a small city in the Arab world that no one has ever heard of. As part of their efforts to raise the profile of their city and attract tourists, the residents of Zone 0 decide to host celebrities at the only four-star hotel they have.

The rest of the story emerges from the comic events that follow. The 15-minute show, broadcast on Sama Dubai, has reportedly been received well by Arab audiences. The production house is not sure whether it will produce a second season of Zone 0 next year but has confirmed that Shaabiat Alcartoon, broadcast on Sama Dubai every Ramadan from 2006 to 2017, will return to the small screen next year. MBC1, Sama Dubai and Dubai TV had the top five programmes this Ramadan, according to IPSOS, with Ramez Taht Al Sefer, Aawad A’bab A'an Jadd and Al Rawi securing first, third and fourth place respectively. Al Rawi on Dubai TV was the fifth most popular.

**ScreenX to debut in Kuwait and UAE**

CJ 4DPLEX has announced a partnership with Kuwait National Cinema Company (KNCC) to bring ScreenX – a multi-projection system providing 270-degree panoramic film viewing experience within a theatre setting – to the Middle East. This partnership will bring the very first ScreenX to Kuwait. The company has also partnered with Dubai’s Reel Cinemas to bring the first ScreenX to the UAE. The new ScreenX will open at Reel Cinemas in Dubai Mall.

**Telestream expands team**

Following the creation of its two technology business units in January, Telestream has announced an expansion of its leadership team. Alistair Butler joins the company to serve as Chief Sales Officer, leading the sales organisations for the company’s Media Production and Workflow business unit, and its Video Quality Monitoring and Analytics business unit.

**Blink Studios wins Auggie award for Karim and Noor**

Dubai-based Blink Studios was awarded the Best Art or Film Auggie award for its animated short series Karim & Noor during the 2018 Augmented World Expo (AWE), a well-established industry AR & VR awards event, which takes place annually in Silicon Valley. This win marks a first for the Middle East and adds to Dubai’s claim towards global innovation; the release stated. This year’s submissions were voted on by myriad professionals in the realm of futuristic technologies, including Pearly Chen, Principal Group Programme Manager at Microsoft; Mark Sage, Senior Product Manager at Google AR/VR; and Dr Heng Choi, Chief of Staff at HTC.

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* SRP excludes duties, shipping and sales tax.
Lebanon’s LNB inks disti deal with SPI/Filmbox

SPI International/Filmbox has signed a distribution agreement with Lebanese Network Broadcast (LNB) to carry nine international thematic channels from the SPI portfolio. The agreement includes FightBox HD, DocuBox HD, Fast&FunBox HD, Filmbox Art House, Gametoon HD, Funbox UHD, FilmBox and FashionBox HD.

Commenting on the agreement, Fadel Hodroj, GM and CEO of LNB, said: “Since August 2017, the mission of LNB is to unify all wired cable operators under one platform and acquire copyrights for them. I am pleased that we have established a deal with SPI International for the distribution of the popular Filmbox channels on all platforms for the territory of Lebanon. LNB looks forward to having a long-term relationship with our new partner SPI International.”

DoP uses Ursa Mini Pro 4.6K to film Turkish show Adini Sen Koy

Popular Turkish soap oper Adini Sen Koy Its Name Is, which is in its second season and attracts a large audience every day in Turkey, is reported to be using Blackmagic Design’s Ursa Mini Pro 4.6K digital film cameras as its principal camera package. Directed by Fulya Yavuzolu, the show is lensed by Director of Photography (DoP) Emre Yilmaz. Yilmaz said he selected the Ursa Mini Pro as his preferred camera because its image production and light sensitivity give him flexibility to maximise a packed shooting schedule, which includes shooting 15 to 20 pages of script every day, six days a week. The production team relies on a Profess workflow for acquisition and post. Adini Sen Koy is also graded with DaVinci Resolve Studio, with Yilmaz praising its colour rendition and speed of use.

DoP uses Ursa Mini Pro 4.6K to film Turkish show Adini Sen Koy

MBC Group to focus on KSA, new markets

MBC Group will look to aggressively push into new markets and sectors in various fields, and the network will have a greater focus on Saudi Arabia and neighbouring markets, Waleed Al-Ibrahim, Chairman of the broadcast network, told MBC’s senior management and executives at a strategic meeting that be chaired at the company’s headquarters in Dubai last month.

A statement from the broadcast network said the company’s focus on Saudi Arabia is in line with the “current transformational positive changes occurring in the Kingdom across various sectors, including but not limited to: premium content production, media, entertainment, ITC, technology and others”.

This is Al-Ibrahim’s first known appearance in Dubai after being detained in the Kingdom earlier this year on corruption charges, along with several other high-profile Saudi nationals. Al-Ibrahim was exonerated of all charges. He has retained his original stake in MBC Group and continues to serve as Chairman of the Group with management control.

Al-Ibrahim highlighted that future expansion plans and in-market opportunities, especially in Saudi Arabia, will bring broader opportunities across the entire group.

EMIRATI DEBUT ANIMATION FEATURE SEeks FUNDS

Emirati debut animation feature seeks funds

The makers of Emirati debut animation feature Catsaway are seeking funds for production. Emirati director Fadel Saeed AlMuhairi has confirmed to BroadcastPro ME that that he is “currently looking for big sponsors who can fund the project.”

He added: “We have just received support from twofour54 that will see us through post-production. I already have two distributors for the MENA region.”

Catsaway is being produced by Tent Pictures Productions which is based on twofour54’s YouTube channel. AlMuhairi stated the project will be completed only next year.

“The more money that comes in, the faster we can be. Juice Studios will be able to hire more artists and save time.”

New CEO for wTVision

Nune Alexi, wTVision founder and former Chief Operating Officer and Country Manager of wTVision in Poland, has been appointed as CEO. Mário Sousa, CEO since the company was founded in Lisbon 17 years ago, who oversaw its global expansion, will now become Non-Executive President and join Mediapro (wTVision’s parent company) as Head of Sales & Marketing for the American market.

Content distributor GoQuest plans to create unscripted programming for the MENA region

Indian content distributor GoQuest Media Ventures has launched GoQuest Digital Studios, which will develop, produce and distribute unscripted programming. The studio will have operations in India, Southeast Asia, the Middle East and Africa. Productions are slated to start by next quarter, according to company sources. The division will be headed by Dhrshan Bhate, the newly appointed Director.

The studio will create content based on original IP or formats, for an energetic and fast-moving audience, the release stated. The focus will be on organically integrating branded content into storytelling.

UK actors unite to support British-Iraqi-Emirati filmmaker

In a show of support for British-Iraqi-Emirati filmmaker Mário Sousa, AlJabbouri and winner of the IWC Schaffhausen Script Prize at Dubai International Film Festival in 2012, presented at the Royal Court Theatre as part of a fundraiser for Pachachi’s forthcoming film, the ninety-minute

presentation kicked off with the screening of documentary footage from the film’s recent Middle East test shoot. It concluded with a Q & A with comments from the director about the state of the film industry in Iraq and the need to create more opportunities for young Iraqis aspiring to act and make films there (a main goal of the fundraiser).

Another Day in Baghdad (Arabic title Kulish Makal) is a UK-France-Germany-Kuwait co-production. The film has been supported by the British Film Institute and shooting is planned for autumn 2018 in Jordan and Iraq.
The much-anticipated World Cup has been marred by political spats across the MENA region, with accusations of piracy and politicization levied by countries and broadcasting networks.

On the eve of the event, beIN Media Group, which has the exclusive MENA broadcast rights for the games, surprised football fans when it announced that 22 matches will be broadcast on beIN’s free-to-air channels in the region – although it was not known which matches would be shown free.

The free matches were reportedly to be shown on beIN Sports News HD and beIN Sports HD. Although it is unknown how this announcement may have impacted UAE IPTV platforms such as Etisalat and du that had bought the rights to rebroadcast the matches, beIN’s “goodwill gesture” is likely to have come in response to Egypt’s complaints to FIFA that selling the rights exclusively to beIN breached its competition laws.

The Egyptian Competition Authority (ECA) had issued a statement criticising FIFA and stated that it will ensure free terrestrial broadcasts of 22 matches from the World Cup.

To add to this, Moroccan public broadcaster Société Nationale de Radiodiffusion et de Télévision (SNRT) obtained broadcasting rights for 22 World Cup matches. The initiative reportedly came as SNRT concluded an agreement with beIN Sports North Africa and the Middle East.

Politics apart, companies such as Sony Corporation presented a range of 4K initiatives at the 2018 World Cup, and Entel’s Broadcasting Communications announced that capacity equivalent to 5,500 hours of HD transmission had been booked by several TV channels and service providers on its satellites.

World Cup coverage marred by controversy in the MENA region

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VOX Cinemas launches in City Centre Sharjah

Retail company Majid Al Futtaim opened its first VOX Cinemas location in Sharjah last month. Located in the new extension of the mall, the new multiplex has 12 screens, reportedly making it the largest cinema in the emirate. Majid Al Futtaim has also announced plans to open 600 new VOX Cinema screens across Saudi Arabia over the next five years, at an investment of $533 million (SR2 billion).

Colors TV conducts talent show for 65,000 UAE blue collar workers

Colors TV launched its maiden Colors Ke Sartaj, a talent hunt show targeting about 65,000 blue collar workers in the UAE. Colors Ke Sartaj conducted auditions in approximately 40 labour camps in the Al Quoz area of Dubai. The contestants were judged based on a number of talents ranging from singing, dancing, mimicry and stand-up comedy, among others.

The winner of the show to be announced at a grand finale on July 6, will win a cash prize of approximately $2,700 (AED 10,000) along with prizes from the sponsors.

Why did Arab Format Lab select Red Band Society as its first TV adaptation?

Red Band Society matched our vision and mission to develop and adopt socially relevant content as well as introduce new talents and new genres of drama, whereas research indicates tangible audience gains.

The Arabic adaptation is based on the Spanish TV series Polseres Vermelles. It is the first Arabic teen comedy-drama in the Middle East.

The series was reproduced in the US by Steven Spielberg and has been localised for 14 countries. We have bought the exclusive rights to produce an Arabic version of both Seasons One and Season Two.

Was this only launched for Ramadan? And what has the audience feedback been?

The show is not a typical Ramadan series, but this is exactly why we wanted to launch during Ramadan, to stand out from the rest.

A narrator, who is eight years old and in a coma, tells the story of a group of kids and teenagers brought together as patients at a hospital’s pediatric ward. We wanted to prove a point that viewers are open to watching something different beyond traditional content anchored in overpaid superstars and focused on slapstick comedy or repetitive storylines.

Unfortunately, with the lack of people metres in our region, the only real indication is that the on-demand streaming and catch-up services on Abu Dhabi TV indicate that the show was the second most watched during Ramadan. Also, we had positive feedback on social media and specifically Twitter from KSA with lots of viewers thinking that the actors were real patients, thus generating massive support and encouragement.

Where was the show shot?

The production takes place inside Hospital 50757 in Cairo and a few outdoor locations around Egypt. We spent seven months on pre-production, casting for young actors who also came from Egypt. Two production units worked in parallel. We will resume production on Season Two in a few months.

How did you localize the plot?

The success of any adaptation is in embedding the story line within the local ambience. In Red Band Society, we adopted several real-life stories of patients and families in the hospital.

What were the platforms?

Season One aired on five FTA channels. For the Gulf region, it ran exclusively on Abu Dhabi TV and non-exclusively on four Egyptian channels namely Al Nahar TV, Nile 1, Egypt1 and Sad Albalad TV. In our deals, we embedded a holdback period on these channels to allow for second windows and exclusive OTT windows with box set at 14 hours.

What are your plans in terms of future productions?

We are very excited about the Saudi sitcom Daght Fount – an in-house comedy about the challenges of starting and managing an all-woman driving school in Jeddah. Moreover, our writers are finalising the Arabic adaptation of the highly acclaimed international NBC format, Family Guy, from the lives of an extended multi-cultural, multi-ethnic family of eight, with a focus on raising an autistic grandson. Also as of September 2018, APL is launching the “Sad Albalad Format Lab” in Jeddah and Riyadh as an alliance and aggregation of eight to nine Saudi start-up media companies and professional young talents covering key sectors of audio visual production.

“Audiences are ready for different genres during Ramadan”: Khulud Abu Homos

The trail-blazing CEO and founder of Arab Format Lab, Khulud Abu Homos, speaks to BroadcastPro ME about the successful Arabic adaptation of Red Band Society, the American teen medical comedy-drama series, and other productions and initiatives in the pipeline.

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The arab States Broadcasting Union (ASBU) has earned huge respect from the MENA broadcasting community, primarily public broadcasters, and with good reason. The non-profit entity has worked tirelessly over the years to produce technically innovative solutions that benefit the broadcast community as a whole.

The Arab Radio and TV Festival, organised annually by ASBU, has often served as the platform to showcase such innovations, from regional players as well as broadcast manufacturers. The 19th edition of the festival, the first to be hosted at Tunisia’s brand-new City of Culture venue in Tunis, was held in late April this year. North Africa’s flourishing broadcast market and declining market conditions in other parts of the GCC have contributed heavily to larger visitor numbers at the festival, which has grown in prominence with each passing year.

Proximity of the venue to the city centre saw a large number of residents attending as well. “This year, we had more than a thousand non-Tunisian visitors and several more Tunisians,” remarks Abdelrahim Suleiman, Director General of ASBU. “These numbers are becoming more challenging for us, both in terms of organisation and visitor accommodations. We will need to rethink the Festival’s format and content to accommodate larger numbers.” He adds that ASBU has now signed a three-year agreement with the Tunisian Ministry of Culture to hold the festival at the same venue for the period of the agreement.

The next Arab Radio and TV Festival is scheduled to be held from June 26-30, 2019, again at the City of Culture. Unlike previous editions, it will be held over five days to include the staging of the Arabic Song Festival as well.

While considerable focus was given to both Palestine and Saudi Arabia, with special cultural and music shows as well as seminars being organised around these countries, ASBU used the platform to showcase the upgrade of its MENOS project and an innovative and features-rich cloud ecosystem designed to benefit all members of the MENA broadcast community, instead of each one building its own.

The MENOS upgrade was completed earlier this year and replaced its predecessor, which
had been operational for more than 10 years. The new MENOS+ is based on Neveco’s Dialog multiservice broadcast solution. “MENOS+ has helped us save up to 50% on additional satellite capacity that will be used to increase the number of HD exchange channels. Additionally, the quality of the Fast News Gathering (FNG) content will be dramatically improved from 3Mbps to 2Mbps and more. All this will be done by using the same space segment on Arabsat 5A. In addition, MENOS+ supports CID (carrier identification) for the reduction of interference on satellites,” explains Salomon.

The greater showcase, however, was the ASBU cloud offering, born out of the desire to genuinely address a common requirement in the Arab world – the need for a cloud solution. Not every broadcaster has the know-how or the ability to invest in a cloud solution, as the dramatic shift in technology also calls for a radically different mindset at the workplace, a shift in work practices, upgrading knowledge significantly and meeting several other challenges typical of such a migration.

ASBU decided to address this by building a common cloud solution platform with all the necessary apps hosted on it so that members merely had to tap into this instead of building their own cloud ecosystem. The result is the ASBU Cloud Platform (ACP), a cloud-based solution with the second largest geographical footprint in the world after China. “Software-defined solutions are here to stay and, before we know it, hardware-led solutions will be phased out. This will put additional burden on our members to keep abreast of the latest technology. Already, our region lacks a cloud infrastructure and it seemed impractical for us to wait until such infrastructure was introduced. Hence our strategy to lead in cloud enablement in our region and build a platform that can serve our region well and seamlessly integrate it with the global cloud infrastructure.”

Abdelrahim Sulaiman, Director General, Arab States Broadcasting Union

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Abdelrahim Sulaiman, Director General, Arab States Broadcasting Union
that has dramatically improved content sharing among its member broadcasters’ newsrooms. We’re also in the final stages of deploying an Archive MAM,” adds Suleiman. 

The platform hosts an array of applications that serve the entire broadcast chain. They are being made available for broadcasters to choose to deploy individually. Although designing a cloud infrastructure intended to serve a larger community in this way took considerable time, deploying an application on the ASBU CloudStore takes no longer than it does on the App Store.

“We have a main interface and the app developers provide APIs that enable our partners to integrate its functionalities within the interface, and that may take less than a week to complete. “An added benefit here is that because our platform is of distributed topology, it also ensures redundancy for apps, meaning that we host the applications on all of our nodes,” explains Suleiman.

ASBU’s magnanimous gesture of offering a platform that allows member broadcasters only need an interface and elements necessary means most broadcasters only need an interface at their end to use the entire system. “Previously, newsroom system applications were hosted locally as standalone solutions with limited features to remote access. The same is true for post-production tools like editing, where the content is stored in either a local server or in shared storage provided by the developers. With the ASBU cloud enablement, there are actually a number of multiple newsroom systems to choose from, as we try to be neutral about application providers and leave the choices with member broadcasters,” says Suleiman.

“The main benefit our members will see, however, is that deploying an application is simple and straightforward and they can carry out trials and PoCs before reaching a migration decision. We enable them to connect to each other on the data plane and similarly on post-production servers, and leave the choice of application for them to connect through. This, in reality, means that sharing is at a metadata level only and subject to access privilege, since the main asset, which is the video, already resides near each other in the cloud services beside the on-premise ones.”

With such a huge infrastructure available and Africa being as weak as the Middle East and southeast Asia in terms of cloud enablement, ASBU has decided to extend the services to Africa as well.

“If you look at the global cloud map, you will see that the Middle East, Africa and southeast Asia are the weakest areas, and this is largely due to the market monopoly by public telcos relating to network conditions. We are now in the final stages of joining hands with the African Union of Broadcasting (AUB) in extending the cloud network there with creating further nodes around Africa to serve public broadcasters there.

“The AUB alone has more than 48 public broadcasters, and boosting their content sharing capabilities between them and among other broadcast union members in Europe (EBU), Asia (AIBU), North America (NABA) and South America (UARCA), in addition to ours, will help them significantly. African broadcasters mostly have legacy equipment with low efficiency and moving to the cloud will significantly improve their level of production and delivery, so we expect the impact to be high.”

ASBU has decided to exploit the full potential of its cloud platform, taking its member broadcasters further on the OTT journey as well. Within content distribution services, it already provides a global unidirectional OTT platform to members. With content everywhere mainstream in the developed world, the organisation expects OTT to grow in significance in the MENA region as well.

“Currently, there are demands from our region’s diaspora who already consume their media via OTT platforms such as Apple TV, Android TV, gaming consoles and of course apps on mobile devices and pads. They want to be able to access VoD, record episodes on virtual PVRs, listen to podcasts and create their own playlists just like they do now from their mainstream providers. In our region, we see the sale of smart TV screens taking off and this means that TV and radio distribution has to catch up with the technology too.

“Our members continually remind us of the need to improve their presence on social media platforms and in 2016, we adopted a strategy to look at social media as a critical part of the media and have created a permanent committee for it. With all that, it was natural that we seek to exploit content distribution trends within OTT and we are currently running PoCs to address the demands of our members’ viewers in the region.”

ASBU, being a non-profit entity, has taken on the initial investment for its cloud infrastructure as well as its MENOS+ systems as it has done previously. While Suleiman does not divulge exact figures, he states that this is a multi-million-dollar investment. With benefiting the broadcast community being its top priority, ASBU will recover its investment slowly, as it has done in previous initiatives, through membership fees.

“Being an organisation of the Arab League, ASBU is a public-sector enabler in the first place and is a not-for-profit organisation. We reinvest all our resources into maintaining public media service evolution. The impact such an evolution creates is, of course, priceless.

“The investment has largely been in the time and resources to carry out R&D and PoCs through our permanent committees and within the ASBU infrastructure in Tunisia and Algeria. Fortunately, our executive council has a long-term vision and is not afraid of trying, because ‘Whoever never try never know’. Once we are positive of the benefits, scaling the solution is the natural way to go. Furthermore, with the upgrade to MENOS+, ASBU will save half of the satellite bandwidth allocated to MENOS services.

“This means a saving of more than one million dollars needed to accommodate the additional capacities to create more HDTV contribution channels,” Suleiman explains.
The main elements that make the ASBU Cloud Platform exceptional

The ASBU Cloud Platform (ACP), developed in conjunction with Mediacoast International, is a cloud-based platform built on a distributed cloud topology, meaning it has a meshed network of POPs (Point of Presence) erected in data centres in strategic cities around the world and providing ultra-high internet connectivity (>100Gbps speed). These POPs are directly connected to national nodes, particularly across the Middle East and Africa.

One of the main assets of the ASBU Cloud Platform is its network topology. ASBU has invested heavily to create an ideal network condition in terms of latency and jitter by going with the SDN principle of guiding packets to travel on defined routes. “Like toll-operated highways during rush hours, the fastest routes are available only to those who pay,” explains Yaser Ballal, Managing Director, Broadcasting Media – Mediacoast International, further pointing out that this cloud platform is unique on several levels. For one, the platform facilitates work even if there is no connection to a central server base as in most classic cloud systems. Any two points within the ACP are considered a wide area network (WAN).

“Everything from pre-production to delivery has now been virtualised. Essentially, all that the user needs is a good connection to the cloud network and commodity IT infrastructure like their screens and keyboards”

Yaser Ballal, MD, Mediacoast International

Another significant breakthrough for the development team has been achieving a complete virtualisation of the entire broadcast operation chain. “This means that only the cameras are real. Everything else from pre-production to delivery has now been virtualised. Essentially, all that the user needs is a good connection to the cloud network and commodity IT infrastructure like their screens and keyboards, because the rest of the assets come through a desktop just like you get with Microsoft Office 365. The only difference is that this desktop is virtual and requires no PC to run on, because it has super powerful servers providing the computing power users may need and video-specific all-flash storage servers,” says Ballal.

Through a single log-in, users can then access all the functionalities as apps on the CloudStore. This is achieved with a combination of on-premise and on-cloud servers hosting applications of choice. This not only ensures that the broadcasters’ infrastructure enjoys full redundancy in both the servers and the application plane, but more impressively, it provides complete operational back-up and operational geo-redundancy. In essence, a broadcaster can shut down its HQ and continue to operate from the alternative location, and switch between them seamlessly without interrupting operations.

Video play servers, vision and audio mixers, lighting control consoles and teleprompters to CDs, post-production editing, graphics, MCR functions and keyboards, because the rest of the assets come through a desktop just like you get with Microsoft Office 365. The only difference is that this desktop is virtual and requires no PC to run on, because it has super powerful servers providing the computing power users may need and video-specific all-flash storage servers,” says Ballal.

The inter-connections with public cloud providers such as Azure, Google Cloud, Ali Baba Cloud and Oracle Cloud bring hybrid cloud to the region. Both application vendors and users alike benefit, while vendors can host their applications in public cloud infrastructure and subscribers have faster and secure access through the ACP-optimised and private delivery network within the Middle East and surrounding regions. This is because the core POPs of the ACP are housed at the same data centres as the core POPs for tier-1 public cloud providers, where physical multi-gigabit fibre connects with their infrastructure.

Because ACP has massive, super speedy flash disk storage capabilities in its inventory, it enables full, active archive redundancy capabilities. Member broadcasters can upload their entire archive assets on assigned and secured vaults that are always up and instantly accessible from anywhere with any device. This makes searching, retrieving and copying archives to an editing timeline possible even from remote desktop phones,” Ballal points out.

One of the things the team：“There are no known native CDN operators in southwest Asia, the Middle East and Africa that can take the ACP to new frontiers like the consumer industry or educational, health and other digital economy empowerment applications. In the years to come, as the ACP matures and expands horizontally with more POPs and vertically with the size of the applications, its uses will differ greatly from what it was originally set out to be.”

But the network infrastructure does not stop here. A lot of work was carried out to cross-connect the ACP POPs with all the major legacy and IP broadcasting provider networks on a global scale. This includes major fibre providers such as Vyvx, contribution switching centres and teleports, and DTH distribution operators such as BT Tower in London, Visitec in Paris, PCW in Hong Kong, Softbank in Tokyo, TATA MES and EBU’s Eurovision in Geneva – among 30 other teleporters – providing a seamless signal flow without undergoing undue recoding and conversion, thereby making connectivity available at the desktop level.

Further cross-connections in the MENA region with DMC in Dubai, Eshailsat, Arabsat in Saudi Arabia and NileSat teleports are being planned to provide seamless backbone connectivity to DTH platforms and to provide virtual downlink capabilities to ASBU members to receive any satellite signal without the need for a downlink is now becoming a reality at their premises. The ASBU NOC based in Algiers takes care of that,” explains Ballal. While all this networking effort seems fitting for a community of more than 20 public broadcasters, the inter-connections with public cloud providers such as AWS, Microsoft Azure, Google Cloud, Ali Baba Cloud and Oracle Cloud bring hybrid cloud to the region. Both application vendors and users alike benefit, while vendors can host their applications in public cloud infrastructure and subscribers have faster and secure access through the ACP-optimised and private delivery network within the Middle East and surrounding regions. This is because the core POPs of the ACP are housed at the same data centres as the core POPs for tier-1 public cloud providers, where physical multi-gigabit fibre connects with their infrastructure.
SAUDI ARABIA EMBARKS ON OTT JOURNEY

Lebanon-headquartered OTT solutions provider ITWorksME speaks to BroadcastPro ME on designing, customising and deploying an online platform for Saudi Broadcasting Corporation in time for Ramadan

Saudi Broadcasting Corporation (SBC) has made some ambitious moves in recent months, which include the launch of two online platforms, shashat.com.sa and sbc.channel.sa, to provide its audience with a video-on-demand and live streaming service. Lebanon-headquartered OTT solutions provider ITWorksME, which has operations in the US and Europe, was contracted to design, customise and deploy this online platform for SBC.

ITWorksME is no small player. Founded by CTO Salloum El Dahdaah and partner Dominick Halajian, the company has bagged a number of OTT projects in the region and has created an online platform for Sharjah Media Corporation, Rotana Media Group, Kuwait TV and most of the Lebanese TV stations in recent years. With SBC, the company was mandated to deliver an initial service in less than three weeks. “We were looking to create a video-on-demand (VoD) portal and offer live streaming for our TV and radio channels, and we needed to launch this within a very short timeframe,” says Rana Assery, Chief Information Officer at SBC.

As part of that initial service, shashat.com.sa and sbc.channel.sa were available in time for Ramadan, and provided a VoD service as well as live streaming for SBC Channel and KSAtlanta.

“The system we have developed is mature enough to handle such projects and we have the ability to meet short timelines, although it comes with challenges,” says Salloum El Dahdaah, CTO at ITWorksME.

“We have all the solutions in the workflow, all the way from ingest to delivery. The main reason they chose our solution was because it is well integrated with most content management systems and has a host of integrated artificial intelligence elements that facilitate automatic video publishing and delivery. This made the client’s choice easy, as we were able to provide a full solution from hosting, security and video delivery. We were able to deliver everything for them to go online.

“Time was a big challenge for such a portal, we had to accomplish training, integration, and testing all at the same time. Failure was not an option, we had to make sure everything was running smoothly,” he adds.

The Lebanese company takes credit for creating a comprehensive online solution that includes a hosting solution for the websites, a secure platform, a CDN built-in-house, a live streaming solution for the TV channels and a VoD service for the shows.

SBC’s online platform uses several of ITWorksME’s proprietary solutions, but especially worthy of mention are the company’s own KWIKtranscoders transcoding algorithms, which ensures high video quality with the highest compression rate possible; its in-house CDN solution, ITWorksCDN, which can be expanded into a multi-CDN optimised for video delivery; a custom-built, feature-rich player called KWIKplayer, and a DVR-live solution (KWIKhrvr) that allows the publisher to go back in time and clip any video on the spot without the hassle of uploading it.

“Failure was not an option, we had to make sure everything was running smoothly”

Salloum El Dahdaah, CTO, ITWorksME

“In this project, we have more than one solution involved,” explains El Dahdaah.

“The client has chosen the Exagon CMS, a solution developed and maintained by Triangle, a digital creative agency, which is well integrated with our KWIKmotion solution for video delivery. KWIKmotion is integrated with other CMS solutions such as Skwid. The VoD CMS, IMS and WordPress among others.

“We automated the content ingest process so there is zero human interaction. This means whenever they upload a video and put it in its show folder, the platform automatically creates a page for it, making it available online without the need to go to the CMS and create the show manually. The system picks up the title, the description and the publication date and creates the page automatically.

“The DVR-live feature allows the customer to go back in time with his linear stream, clip the video and publish it without the need for any upload or download. Our KWIKwatermark solution is used to sign the videos with the appropriate channel logo. Our CDN was used to ensure smooth video delivery. The feature-rich KWIKplayer provides features similar to Chromecast, including airplay, an elegant thumbnails display, advertising support and adaptive playback.”

El Dahdaah is especially proud of the tech highlights of the project, which include AI, video encryption, transcoding on the...
go and the company’s proprietary CDN solution. In fact, these features have helped the company secure other projects as well.

“We have had a number of factors working in our favour,” explains El Dahdaah. “For one, we offer a very high level of support to our clients. After shaq Media Corporation, we won the contract to build a fully redundant solution for the Ministry of Information in Kuwait.

“They had the challenge to deliver their online platform to a large number of users, and our solution was able to cater to their need. We have also provided our services to most of the Lebanese TV stations. In fact, this is where we started seven years ago.”

ITWorksME claims a world first, explaining that its KWIKmotion platform is one of the first in the world to connect its linear signal to Facebook and Twitter Live.

“We put a huge amount of effort into research and development, and this has helped us stay in the lead. With the industry changing every day, and consumer behaviour changing daily, there is no place for wrong steps,” El Dahdaah says.

At the 2018 Web Summit in Lisbon last year, the company was featured under innovative solutions by the organisers. El Dahdaah is a Linux expert and an IT geek, having dabbled with programming since he was young.

“I was only 13 when I decided to have Linux running on my computer. I had a vision that the future of enterprise will revolve around servers and not end users’ computers. I am passionate about research and in those days, we didn’t have Google. We had to learn everything from books,” he explains. El Dahdaah later graduated with a degree in Computer and Communication Engineering and co-founded ITWorksME with partner Dominique Halajian.

“It was hard at the beginning, as the real world is different from what you do on your own. One of the TV channels was looking for a complex hosting solution in 2010, we took up that challenge and delivered in time. We knew back then that we would need to offer a different experience to be noticed.”

Later on, the client came back to us for a streaming solution. In a country where the internet speed was 256kbps at the time, this was indeed a challenge, but we did manage to provide a solution.

One of the things the partners did over time was build a CDN solution, used by several regional clients. “Threading from our end user’s point of view pushed us to create our own CDN delivery,” explains El Dahdaah. “Live streaming is challenging; there is no place for browser caching, your delivery requirements are demanding, so you need to have really efficient delivery with low latency and 24/7/365 monitoring.

“There are plenty of CDNs in the world, and some of them are top-notch. However, none of them allow you to customise each aspect, and this is where we are different. All the way from the DNS, you can make a choice whether it is the server, the carrier or the data centre. Our CDN treats the TCP packet differently from other solutions, allowing us to have a better throughput. It is designed to serve videos rather than static content.

“As a result, a lot of customisation was done at the kernel level for low CPU usage and fast caching method. We also have inside routes to move the content from the origin to the edges quickly. This allows us to eliminate latency; we are even delivering the secret token keys at the level of the edges and this ensures very quick playback. We have constantly been improving our CDN, enhancing it and fine-tuning it to deliver the best outcome. You need to have a good security layer, you need to make sure you are up everywhere, you need a lot of connections with different ISPs. All this has been done. It is a lot of work behind the scenes. ITWorksME took the jump to create this, and it has paid off.”

“There have been several challenges with the Saudi platform, as with any such project, explains El Dahdaah. The core of SBC’s online platform is built around ITWorksME’s KWIKmotion platform, which is secure and comes with a host of features. Besides the common features in such platforms, KWIKmotion includes automated captioning in multiple languages and, several levels of security, provides a very high level of compression, offers immediate delivery service to maintain smooth video distribution, and has connectivity with social media platforms for rapid publishing. Multiple training sessions were provided to Saudi TV personnel on-site and for online streaming, with an online manual provided for anyone who wants to do a quick reference. KWIKmotion is in a continuous state of upgrade, and at the moment, we are working on adding a lot of new features like dynamic pictures recognition and tags automation to it in the near future. We are working hard to release some new features at the end of Q4 2018. In fact, we are working closely with some consultants to enhance the UX and UI on the platform. We want to deliver a beautiful workflow for our customers while keeping the strong basis we have,” explains El Dahdaah.

“In the meantime, the network is quietly working towards developing additional solutions. For now, the broadcast network’s CTO is pleased with the progress the online team is making.

“We are pleased to work with a partner who’s available and supports us 24/7,” adds the broadcast network’s CTO Ebra Arassy.
STORYTELLING IN CONFLICT ZONES

To interview a reformed pirate in Somalia’s Puntland, you need to pack right, move equipment resourcefully through airports and learn to film in armoured vehicles, says veteran news cameraman Alessandro Pavone in conversation with Supriya Srinivas

After seven years of reporting from conflict zones, Alessandro Pavone, a Dubai-based documentary filmmaker and news cameraman, knew the two-week PBS Frontline assignment early this year, to Somalia, was not one for a large camera.

He recalls: “I was inside an armoured vehicle and the space around me was restricted. You could barely move, let alone handle a large camera and lens. The good thing about the Canon C300 is that it allows me to use my shoulder in confined spaces, in addition to communicating better with my set of Canon lenses. The automatic tracking of faces is also a great add-on feature, given the dynamic nature of my assignments. Getting skin tones accurately is also a critical feature for me, as it reduces time spent on colour grading in post.”

The only issue was following the Somali police at night. “It was pitch dark,” says Pavone. “I then used the Sony Alpha A7S mark II, a small, mirrorless, still-4K camera. I use it as a second camera as well, in situations where I need to do a two-camera interview. It is compatible with other lenses, and it is full-frame and great in low light. You can, for instance, go up to 8000 ISO. I got this great footage of Somali police men under streetlights.

“The camera is also good for ingenuo filming. In Turkey, while shooting for Vice HBO on the issue of human smugglers in Izmir, the camera came of use when filming smugglers in busy markets. I was standing next to a taxi with the Alpha A7S filming the footage and it was perfect. “In addition, I had a GoPro camera for the Somalia assignment. I put one on the armoured vehicle because at times, it was dangerous to be outside.”

Pavone has made a career of covering major conflicts and humanitarian crises around the world. “The feature story we did for PBS was part of a series of 10-minute documentaries on individual countries, with three or four stories for every country. We did three stories for Somalia – on piracy, climate change and security. In the two-week duration, we traveled from Mogadishu to Somaliland in the northwest of the country and then to the middle, where we recorded climate change. I was accompanied by PBS correspondent Jane Ferguson.”

Having cut his teeth as a news cameraman in Afghanistan seven years earlier, Pavone was prepared to spend the two weeks travelling in armoured SUVs, even occasionally telling the bodyguard armed with an AK47 standing “behind all the time” that he was in the shot. Packing for such assignments is a series of strategic decisions aimed at ensuring he can hit the ground running.

“On such assignments, I cannot carry three to four Pelican cases with equipment. All carry is one backpack with a tripod and a camera. I also carry a flexible LED panel from Cineroid. I discourage travelling with Pelican cases. They are heavy, big and attract customs officers and thieves.”

“Never, ever check in cameras and lenses, advises Pavone. “I tend to carry everything on my person because you can lose the gear. Imagine you kind in the country and you cannot shoot straight away. Along with the camera, I carry the lenses and batteries since you cannot check in batteries. The whole gear can weigh up to 30kg and the limit is 8kg. I need to arrive well in advance at airports because all the checking and questioning is time-consuming.”

Arguments with airport officials extend also to bulletproof vests, which understandably raise eyebrows.

Pavone explains: “I go to war zones and I need bulletproof vests for myself and the correspondent. Airport officials want to know why I need the gear. I recall the jackets being confiscated for the whole length of the assignment in one airport.”

To capture the extent of water scarcity in the arid heartland of Somalia, Pavone opted for a piece of equipment he would normally eschew in Dubai owing to the cost and difficulties of getting permission – a drone.

“We travelled to central Somalia for a climate change shoot and the DJI Mavic drone was instrumental in getting this great shot of the dry lands. It was tough to operate on that day, with no mountains to block the extreme wind conditions. Coupled with that was the limited experience I had with drones. In Dubai, you need a licence, and clients hesitate to use it because it costs a fortune – £2,000 just for a 20-second shot!”

Travelling with drones offered its own special problems, but resourcefulness is one key attribute needed for Pavone’s chosen line of work. “The other is compromise, he says. “If you mallet the art of compromise, you will be a good professional. I sometimes work with magnificent cameras for corporate shoots, but for documentary shoots or the shoot in Somalia, you have to adjust your kit accordingly.”

“People now have this kit acquisition syndrome, ranging from buying the next new lens to shooting in 4K. I don’t see the need to shoot in 4K other than the cost or editing points of view. Just because you can use fancy equipment does not mean you should. Arising out of necessity, I have had to build my equipment from the $5,000 it had in Afghanistan to the current kit valued at around $45,000. If you don’t

“I don’t like danger per se, but these opportunities would never have come my way had I stayed in London”

Alessandro Pavone, Cameraman

With the need to travel in armoured vehicles, escorted by armed guards at all times, Pavone uses equipment that allows for greater mobility.

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have the necessary gear, clients won’t hire you. However, at the end of the day, it is all about how the story is told. And if you have a great story, you can film it with an iPhone.”

The editing workflow varies with each project. With the Somalia assignment, Pavone spent five days editing on Adobe Premiere Pro on his return to Dubai. Paired with a reporter, as Pavone was with Jane Ferguson in Somalia, the duo collaborated to tell a story where words and images need to work in harmony.

“As a news cameraman, you are constantly thinking on your feet as to what shot will be relevant. You are editing and filming at the same time, and that is the great skill of a news cameraman.

“As a rule, I tend to ingest every day just to see that everything is in order. I also ensure one Lacie thunderbolt hard drive is with the correspondent and one with me. A typical daily transfer of files would range from 60 to 100GB.

“The actual process of editing for the Somalia assignment took five days for the three stories of eight minutes each. Once the correspondent wrote the script and it was approved by PBS, I made the rough cut. And following feedback from the channel, I proceeded to work towards the final edit. It was his job to proceed with the rough cut. Following feedback from the channel, I proceeded to work towards the final edit.

“I do feel the pressure still after so many years in the field. When I watch my clips, I always believe there is something I could do better. And with news, there is something you always miss, and you essentially use that as a learning experience for the future.”

“It’s difficult to judge what Pavone missed on a news story for PBS. Newsflour covering the brutal urban battle in Mosul, Iraq, all through last year. In the clip, you see Jane Ferguson crouching on the roof of a house, interviewing the local commander of the Iraqi army as it attempts to retake Mosul from ISIS. In the next clip, the army personnel and Jane, all clad in bulletproof vests, are escape enemy fire and a soldier gestures to the cameraperson to do likewise— the only indication the viewer has of Pavone’s presence. "I was in Mosul from the beginning till the end of the final takeover of the city by the Iraqi army," he recalls.

Between flights to cover the crises in Syria, Afghanistan and Iraq, there are pretty clips of Dubai to be shot for The Travel Show on BBC. Pavone indulges the viewer with time-lapse shots and incredible camera angles.

“It is not the place and the people, I experiment with filming techniques to challenge myself,” he reveals.

For this writer, interviewing Pavone was a roller-coaster ride, from camera choices and packing tips to raw human stories. From covering rape victims of South Sudan to human smugglers in Turkey, professionals such as Pavone face the risk of becoming jaded by human suffering.

This writer can attest first-hand that the seven-year veteran does not seem anywhere close to that. Details about camera and gear were gleaned from an otherwise heartfelt narrative about the lovely people of Somalia, living their lives in a country racked by famine, political instability and warlords.

Pavone declares: “I want to tell the best human story. That is my ultimate goal. Every single day, I think about the next story. I make good money; I cannot complain. But if I am not thinking about the next good story, I would quit.”

Pavone’s career began far from the killing fields of Afghanistan. With a degree in Journalism and Communication Studies, he began working as an assistant producer for the BBC. It was his job to arrange for budgets and permits, among other logistical duties.

“The BBC stint gave me a 360-degree view of production. However, I always wanted to be a documentary filmmaker. I was on assignment with the military in Afghanistan when I decided to master my camera skills. I quit my job and bought my first DSLR. I was lucky to be in a war zone and soon found myself in demand from the major channels. I don’t like danger per se, but these opportunities would never have come my way had I stayed in London.”

From keeping content concise to being mindful of the viewer possibly watching the content on Instagram, challenges for content creators like Pavone have grown in strange new ways, keeping him fine-tuning his craft constantly. Also, shrinking production budgets worldwide have allowed him to use skills beyond wielding the camera— scripting and producing shows. The learning never ends, he admits.

“I am constantly watching my peers’ work to learn new techniques.”

Pavone states that the BBC stint gave him a 360-degree view of production. However, he always wanted to be a documentary filmmaker. He quit his job and bought his first DSLR when he was in Afghanistan. He was lucky to be in a war zone and found himself in demand from major channels.

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Alessandro Pavone, Cameraman

Pro Camera Accessories

TRULY CINEMATIC

Authorized Representative: Amaranthine Trading LLC
Motion Picture & Broadcasting Equipment
M-39, The Curve Building, 63 Sheikh Zayed Road
Al Quoz 3, P.O. Box 124137 Dubai - UAE
Tel.: +971 4 339 0944 / 339 0945
Fax: +971 4 339 0922
info@amaranthine.ae
www.amaranthine.ae

Amaranthine
TRULY CINEMATIC
“AR has the potential to make a real difference in the user experience for sports broadcasting. It can be used live at the event to offer more insight for the viewer.”

José Somolinos, Senior UX Product Manager, Accedo

MR is much harder to define, partly because experts have different ideas about what defines these technologies, and partly because they have a lot in common. For example, both experiences can be interactive, both use UI and 3D models over the real world, and both understand to a certain level the context of the user.

To me, AR is about the app understanding the reality and adding a layer of information to it. The central part of the experience is still the world, which is enhanced – “augmented” – with detail. This could be a map app guiding you with virtual arrows, or an app telling you how many goals a specific player has scored when you look at that player.

Mixed reality is about positioning virtual objects or characters over the real world and making them the central part of the experience. You can imagine a Pokémon standing in your kitchen. Even though the technologies are in their infancy, we are already seeing some good experiences being created. The best is still to come once we fully understand the power and possibilities of these devices. There is an exciting future ahead.

Interaction is key

Consumers have shown in the last few years that they respond well to interaction, as the enhancement keeps them engaged and offers a service they are far more likely to enjoy and return to. This interaction can be easily accomplished with immersive technology such as AR, VR and MR, by either delivering a wider view of the action on a second screen or involving the viewer more by immersing them in the action with goggles.

I think sports will be a particularly interesting area for these technologies, especially with the likes of Netflix and Amazon beginning to enter the fray by buying rights to sports such as ATP tennis. Immersive technologies have the potential to both keep viewers loyal by offering them a premium service and entice new consumers to a platform. When it comes to competing, it’s crucial that broadcasters stand out from the crowd – especially in sports broadcasting, as consumers tend to pay for specific sports channels, and so offering more for money spent is a great incentive to subscribe.

The right technology

But this won’t be achieved by everyone straight away. It’s inevitable that in a rush to offer these services, some offerings won’t be properly thought out with the appropriate technologies. For example, a VR headset designed to be worn at a sporting event? Can you imagine it getting much take-up? No.

But VR developments could be considered useful for fans who can’t attend an event. Suddenly, we are offering consumers an at-home experience to rival the in-stadium one. No more queues for the toilets or difficulty parking, just pure sporting content.

Unless you take into account the social nature of sports. Many people invite friends over to watch games or races, and suddenly what seemed like a great idea for immersive technology is no longer applicable.

The cost of VR in the current market means consumers aren’t likely
to buy a headset just for the odd occasions they watch sports alone.

So what can be considered appropriate technology? AR has the potential to make a real difference in the user experience for sports broadcasting. It can be used live at an event to offer more insight for the viewer. For example, while watching a basketball game live, the consumer might want to know how many times a specific player has dunked in their career, and AR could offer that, as well as the statistical chance that the player will score in the current game. This type of immersive technology is also very social, and so fits into the dynamics of sports viewing.

AR has an even stronger case for offering value to consumers for sports content in their own home. Long-distance races can be difficult to keep track of, whether you’re at the event or at home. But AR, especially used in combination with MR, can offer a cohesive view of the race course even while the viewer watches it on a regular TV screen. This can show exactly where all of the contestants are in reference to the entire event, as well as be an interesting and engaging platform for accessing video footage from the event. Imagine having an augmented race track in your living room.

"The live nature of sports demands more from immersive technology. Latency has to be virtually non-existent for secondary screens to be successful"
José Somolinos, Senior UX Product Manager, Accedo

Development is the future

The current market hasn’t matured enough for immersive technology to be found on phones, or in front of the thousands of consumers who take time out to watch live sports every day. In fact, the live nature of sports demands more from immersive technology. Latency has to be virtually non-existent for secondary screens to be successful. No-one wants to be watching a high-speed race and watch the first contestant cross the finish line minutes after it has actually happened.

AR itself needs to be explored, especially for specific use cases such as sports. The use of AR in second screens or AR glasses needs to be compared and experimented with, to decide which one is more applicable for sports. Goggles can be quite bothersome if they are uncomfortable, plus if the consumer is watching the action live, they may be in a sunny environment and therefore would rather wear sunglasses. All of these affect the experience and therefore need to be considered. Meanwhile, a second screen experience may appear to be more applicable, but could in fact be distracting from the action.

Offering more to broadcast

Immersive technologies such AR, VR and MR, when applied appropriately, have the ability to revolutionise not only sports broadcasting, but the media industry as a whole. Storytelling is as old as life itself, but is developing just as rapidly as technology allows it to. Immersive technologies are simply new and interesting ways to tell stories, and they have the potential to change the face of broadcasting.

José Somolinos is Senior UX Product Manager at Accedo.
While most regional broadcasters are still toying with POCs for virtualised playout projects, MBC Group has boldly forged ahead with a full-fledged virtualised business continuity centre that is equipped to take over should the main site be compromised. BroadcastPro ME gets an exclusive first-look

**CREATING SEAMLESS BUSINESS CONTINUITY**

MBC Group recently deployed the Pebble Beach Systems Orca, which serves as the core playout solution at the broadcast network’s virtualised Disaster Recovery (DR) facility. The virtualised DR deployment is reportedly a regional first, as opposed to the proof-of-concepts (POCs) or test channels at most of the facilities so far.

“We look at this facility primarily as a business continuity centre rather than a DR unit,” clarifies Nader Mokhtar, Director of MCR and broadcast technology at MBC and the project manager of the DR/Business continuity site. “This is not a pure DR system. I prefer to call it a business continuity centre because it functions just as well as the main site. MBC is very proud of this site as it is based on a modern and flexible technology all the way from the MCR to its DVB/muxing capabilities and the Orca virtualised playout system. They are all IP-based, where you can monitor and control everything from either our Headquarters in Dubai or anywhere else,” says Mokhtar.

Nick Barratt, Senior Broadcast Manager at MBC elaborates. “The traditional approach with DR has been to have a very scaled down operation compared to what you traditionally have at your main facility. Your media options will be limited, and you will probably run some evergreen generic material that buys you time to get a playlist of what you should ideally have on air. With business continuity, operators can move seamlessly from the main site to the next – just that they have equipment in front of them for one and they are remotely managing the other.”

Barratt points out, however, that a real installation is a far cry from anything undertaken at the POC level. The MBC team worked closely with the Pebble Beach Systems team and he says it was a steep learning curve for both parties, as the technology is still young and the experience in the field is still nascent.

Last summer, the teams from MBC and Pebble Beach Systems started talking about a real installation and over the last several months, the teams have reached various milestones. By late 2017, the Business Continuity system had been fully deployed by MBC, replacing an expensive third-party service and bringing the function virtually in-house, thereby delivering both cost-savings and full business continuity.

By early 2018, 13 of MBC’s most important channels across both sites had been synchronised with the broadcaster aiming to replicate the rest of its channels as well. By February, additional features like the ability to do live sources had been rolled out. The team will soon be ready to roll out 3D graphics as well.

“The 13 channels are totally synchronised with playlists in Dubai and we can seamlessly switch remotely between the main and the back-up sites through IP switches,” explains Mokhtar. “We do not have full continuity graphics on there just yet. Each one of those channels are simulcasting in SD and HD. Orca channels run in a virtual machine (VM) in a private cloud with IP inputs and outputs. These are the key features compared to other installations.”
Both systems are monitored and actions at the remote site. It replicates all playlist edits making it ideal for temporary and event-based services. This MBC deployment cements its application for DR environments, as it runs 24/7 in parallel to the main channels being broadcast from Dubai. "MBC’s infrastructure has a Marina installation in place, so deploying a Marina-controlled Business Continuity solution was the obvious next step.

"The chain of discrete devices controlled by Marina at MBC’s playback centre in Dubai is duplicated at the DR location in a software-defined environment with DR environments, its application for DR deployments is very strong. All domains from a common user interface, third-party Pixel graphics, and loudness running on the same VM as part of the IP broadcast pipeline." says Mokhtar.

With Orca claiming a flexible design and shared memory advantages, it sitsat the middle of the technology chest, receiving and distributing inputs and outputs – replicating the baseband best-of-breed functionality in one box, and integrating graphics, third-party plug-ins for both sides on deploying and tuning the whole system and adding functionality over time. When you stick a box in, it’s expected to do something. The huge learning curve was how to tune and get it to do what you need it to do reliably. Those did create significant challenges. There is a level of trial and error and learning that is different from a POC. And when you are starting to use it, you begin to realise that a weak POC is not good enough to understand how the thing must be tuned to achieve a certain functionality.”

He concludes “Of the back of what we have done and what Pebble has done in DMC, we will have a better idea of what a starter kit should be for something like this in the future.”

"This MBC deployment cements its application for DR environments, as it runs 24/7 in parallel to the main channels being broadcast from Dubai" Samir Isibah, Regional Director, Middle East & South Asia, Pebble Beach Systems system, so we can have something to be multiplexed and uplinked, and obviously that can be repurposed to go over multiple satellites."

"It has been a huge learning process for both sides on deploying and tuning the whole system and adding functionality over time” Nick Barratt, Senior Broadcast Manager, MBC Group

"MBC is very proud of this site as it is based on a modern and flexible technology all the way from the MCR to its DVB/muxing capabilities and the Orca virtualised playout system" Nader Mokhtar, Director of MCR and broadcast technology & Project Manager of the DR/Business Continuity site, MBC Group from Dubai using Pebble Beach’s LightHouse remote management and monitoring tools.

"LightHouse is a web-based application and the plan is to give customers an option to operate their multiple systems on separate domains from a common user interface, rather than having to use VNIs across multiple sites. It uses a Linux server, so security is better and it can eventually connect to both the Dubai site and the other site,” claims Isibah. Barratt says the operator has a graphical view of both sites, making monitoring easier, and can see it on any device, even remotely.

"In addition, the operator does not have to manage the playlist on a day-to-day basis. We load a playlist in Dubai every night and as soon as we load that playlist, a list update gets sent across to the business continuity site, and any changes we make during the day for live events are picked up within half a second of someone doing it in Dubai. The key thing is that nothing changes for our operators in Dubai. They continue doing the same thing they were doing here and the playlist is automatically changed at the business continuity site. Effectively, all we have is a multi-viewer in Dubai from the business continuity side, so if anything happens, they can step in and take control if they need to.”

"We are in the process of deploying LightHouse with the ability to basically control a playlist and load the playlist on the TX side. We are still to get to a point where it will come close to replacing the existing clients, however, we are using it to monitor the global view of the timeline and other such elements.”

Although the Orca is the playout solution, Mokhtar remarks that this is indeed a collective project, which includes solutions from other manufacturers as part of the workflow. For instance, encoding and multiplexing is from Ateme, while there is nearline storage from the likes of EMC/Sanlam. Eventually, there will be also a live version of a MAM solution at the DR site.

"There is a lot more to this project than plain technology. There is the whole networking and connectivity that has been undertaken. There is the transcoding to do with the movement of files from Dubai to the DR site, and the actual contingency plan of how we can get media if we lose Dubai and re-purpose it at the DR site. From an encoding and multiplexing POC, we put out a CVU 20MB for BD and a CVU 10MB for SD, and that’s reencoded and stacked/muxed in the Ateme system as well as allowing us to learn more and produce something useful. It fits into where we see the future going. Of course, there were significant space and machine savings with two racks being more than sufficient to run in all available public cloud, and this is allowing a slightly more controlled environment to get by with users. We are controlling the actual connectivity with the site as well as allowing it to tweak and play with it more.”

In essence, MBC has deployed a virtual environment, using IP inputs and outputs. It is business continuity running in step with the main channels. More importantly, Isibah points out a trend that is becoming increasingly common among end customers, as they move into software environments.

"Today, we see more customers supplying their standard IP hardware and the virtual machine environment. MBC also delivered the hardware and the environment, and our software runs easily in their environment.”

Of course, an installation like this comes with huge challenges. "We had issues with latency and being able to get the IP inputs. It’s working now and we have given our feedback to Pebble Beach Systems. It’s different from other deployments, and therefore the biggest challenge all around was that it was a big learning curve for everyone," says Barratt, adding that it was also a huge learning process for all those involved.

Although there are no cost savings as such, it is an industry-first, adding that it was also a huge learning curve for everyone. "We had issues with latency and being able to get the IP inputs. It’s working now and we have given our feedback to Pebble Beach Systems. It’s different from other deployments, and therefore the biggest challenge all around was that it was a big learning curve for everyone," says Barratt, adding that it was also a huge learning curve for everyone. "It has been a huge learning curve as an industry-standard, third-party plug-ins can be incorporated into one software-defined TX without adding other solutions but eventually settled on Orca, because its users were already quite comfortable with the Marina experience and would find the Business Continuity system easier to operate. Orca offers remote domain list synchronisation, even over a potentially unreliable network.

It replicates all playlist edits and actions at the remote site. Both systems are monitored
Sony has released a potentially game-changing compact 4K camcorder that is equally suitable for broadcast news, corporate events and even television production. The PXW-Z90V 4K HDR camcorder boasts many of the features found on more advanced models in the Sony XDCAM range, including the PXW-FS5 and PXW-FS7, but at a fraction of the cost.

I recently had the pleasure of testing this little powerhouse of a camcorder here in Dubai, and was more than pleasantly surprised. On the outside, it looks almost identical to its popular predecessor, the PXW-X70, but on the inside, and straight out of the box, the PXW-Z90V is a major improvement.

The PXW-Z90V is the first camcorder to feature a one-inch EXMOR RS CMOS stacked sensor with improved autofocus performance and 4K HDR recording. The ‘stacked’ element of the sensor is designed to minimise rolling shutter and can also help reduce noise levels. The sensor is not as big as the super 35mm sensor found on the FS7 and FS5, but for a camera of this size, it works well and allows you to achieve a reasonably shallow depth of field using a large aperture, combined with the very useful three-stage built-in ND filters.

The Zeiss T* lens with 12x optical zoom runs from the equivalent of 29mm to 348mm with a maximum aperture of f2.8, closing to f4.0 towards the telephoto end. It’s an impressively versatile ENG-style lens that’s great for run-and-gun shooting, particularly in news and documentary filmmaking. On top of that, it also incorporates Sony’s Fast Hybrid AF autofocus system, which gives the camera, quick and accurate focusing and tracking. This is specially useful when filming moving subjects.

In fact, the PXW-Z90V’s autofocus abilities go way beyond that, with multiple modes including the useful Flexible Spot. This mode automatically identifies human faces and moving objects, and can even be set by touching the specific point of interest on the screen. A green box will appear around the selected area and will then track the person or object as it, or the camera, moves. You can also use this mode for on-the-move reporting or television production, or both, Tim Orr, DoP at Dubai-based Nomad Productions, offers his verdict on the Sony Z90V 4K HDR camcorder.

For the price and quality, there are plenty of professional camera operators who wouldn’t think twice about using this as an A or B camera on a variety of jobs.

Tim Orr, DoP, Nomad Productions
The camera comes with an in-built stereo microphone, but more importantly, a detachable top handle that contains two XLR inputs with audio control buttons for both channels.

If interchangeable lenses are not a sticking point then go for the PXW-Z90. It’s a pocket rocket that will be hard to match.

Tim Orr, DoP, Nomad Productions

which means the user doesn’t have to spend time down sampling the 4K files. At Nomad, we use Adobe’s Premier Pro editing software, which allows us to use the lower resolution proxy files to undergo what used to be known as an offline edit first, to save time. Once the client has signed off on the film which has been edited at 720p resolution, you can then automatically use Premier Pro to re-link the edit to the original 4K media. The client is happy, and you’ve avoided pulling your hair out over a computer that won’t play back properly.

In conclusion, I have to say I enjoyed using the PXW-Z90. There are a few minor niggles regarding ergonomics, but overall the camera is a joy to use. As far as cameramen go, I don’t think there is anything on the market to rival it, and for the price and quality, there are plenty of professional camera operators who wouldn’t think twice about using this as an A or B camera on a variety of jobs. Although I haven’t done any technical tests, the picture quality on the Z90 is superb, largely thanks to the impressive one-inch CMOS sensor.

If you want a reasonably priced professional camera with the option of interchangeable lenses and a Super 35mm look, then you might want to opt for something like the Sony FS5. But if interchangeable lenses are not a sticking point and you want an almost identical performer at half the price, then go for the PXW-Z90. It’s a pocket rocket that will be hard to match.
Combating confusion surrounding 4K

Film studios are now using HDR in post-production. They are able to work on the entire image using the depth of the data captured in the pixels, producing a better experience for consumers.”

Globally, demand for 4K HD TV sets continues to rise. Buoyed by the prospect of twice as many pixels as standard HD, consumers are now helping 4K TV sales to grow by a forecast 28% in 2017. And it’s not just for TV sets at home. 4K resolution is also proving useful for CCTV and surveillance, drones, tablet screens and even in the medical field with 4K UHD baby scans.

As 4K technology’s popularity continues to grow, so too does the availability of 4K content. From Blu-ray titles to the latest Netflix series, viewers can enjoy a wider range of 4K content than ever before. Globally, there are more than 60 4K services available on air and over IP. And some TV vendors are looking even further ahead. Last year, Japan’s public broadcaster NHK launched the world’s first 8K resolution (7,680×4,320) broadcasts. South Korea teamed up with Samsung last year to deliver the world’s first 8K resolution broadcast during the Pyeongchang 2018 Winter Olympics.

In the coming months, the world’s first 5G broadcast was demonstrated by South Korea. It featured a 5G UHD TV broadcast of a live handball game showing 2,250 pixels per inch. And some TV vendors are looking even further ahead. Last year, Japan’s public broadcaster NHK launched the world’s first 8K resolution (7,680×4,320) broadcasts. South Korea teamed up with Samsung last year to deliver the world’s first 8K resolution broadcast during the Pyeongchang 2018 Winter Olympics.

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