

Broadcaster

Asia-Pacific Institute
for Broadcasting Development
Kuala Lumpur, Malaysia

Quarterly 3 **2019**
VOLUME 19 NO.3
ISSN: 1675 - 4751



16th ASIA MEDIA SUMMIT
12-14 June, 2019
Siem Reap, Kingdom of Cambodia





contents

- 3** Takeaways from the 16th Asia Media Summit
- 5** Cambodia Seeks Strong Regional and Global Cooperation vs Disinformation
- 6** Taking Stock of Needs, Benefits of Digitisation
- 7** Information Ministers from Asia-Pacific Call for United Stand against Disinformation
- 8** AIBD, UNESCO, 2 Universities to Conduct Research on 'Fake News'
- 9** Special meeting on combating disinformation or 'fake news'
- 10** Make New Technologies a Force for Good - UN Chief
- 11** AIBD, ASBU Commit to More Collaboration
- 12** World Television Awards 2019
- 13** Building Leadership Skills to Meet Demands of the 4th Industrial Revolution
- 14** Journalists Should Do More to Verify Content Amid Disinformation
- 15** Unlocking One's Creativity to Produce Impactful Content
- 16** Enabling Traditional Media with Latest UHD Solution
- 17** Impact of AR/VR on Media
- 19** Q&A with Tshering Wangchuk, CEO, Bhutan Broadcasting Service (BBS)
- 20** Cambodia Calls for More Media Responsibility amid Spread of Fake News
Media Urged to Invest More in Research, Innovation, Training
- 21** Innovative Technology - A Key to Korea's Response to Digital Revolution
Content is Primordial amid Advanced Technologies
- 22** Myanmar Cites Positive Impact of Digitisation, Social Media
- 23** Broadcasters Urged to Know their Audiences Well
- 24** Integration of Latest Technologies in Content Creation
- 26** Regulation and Disinformation
- 27** Media Literacy - A Way Forward to Combat Disinformation
- 28** Role of Partnerships in Media Monetisation Process
- 30** Technologies for Distribution of Media Contents
- 32** Creating Archiving Innovations
- 33** Uphold the Centrality of Truth in News Operations
- 34** Combatting Disinformation, Enhancing Media Credibility
- 36** Cambodia Information Minister Calls the 16th Asia Media Summit a Success
- 38** Q&A with the Winner of Category Science/Environment for The Best TV Programme on "Taming the Sea of Plastic"
- 40** Q&A with the Winner of Category Humanity for The Best TV Documentary on "Technology and Humanity - The Impact"
- 42** ConnecTechAsia 2019: Experiencing the Future in Asia's MEGA Technology Event
- 44** Winners will be announced during the GC in Bhutan
- 45** DAB+ Digital Radio Broadcasting: Technology and Implementation
- 46** AMS in Pictures

Takeaways from the 16th Asia Media Summit

THE 16th Asia Media Summit attracted more than 600 delegates from over 40 countries across the globe. A successful conference, no doubt, but more than the number and diversity of participants, what was significant about the gathering were the takeaways that offered broadcasters ways to deal with the growing demands of the Fourth Industrial Revolution and the alarming spread of 'fake news' in the region.

This revolution has seen disruptive technologies and trends that are changing the way people live, work and relate to one another. It requires a paradigm shift in computing and communications, and demands a re-tooling of creative as well technical expertise and mindsets.

Skills retooling

A key takeaway focuses on the need to enhance human resource capacity to maximise the benefits of digitisation and new technologies that can include the optimisation of workflow, bandwidth quality, asset selection-metadata creation, dynamic product placement and content personalisation.

No less than Cambodian Prime Minister Hun Sen in his inaugural address at the summit encouraged media stakeholders to pursue increased professional and technical competencies in order to take advantage of modern technology and face market competition in the digital era.

Mr Fayyaz Shehryar, AIBD President and Director General of All India Radio, echoed the same message saying; "One of the challenges they (broadcasters) face is adequate supply of skilled workers with strong cognitive, adaptive and creative skills necessary for working with the new technologies".

The power of Artificial Intelligence (AI) and automation can necessitate occupational change, thus the need for skills retooling. Broadcasters must consider new competencies as terrestrial broadcasting is slowly

integrating with the immersive video industry such as Virtual Reality, Augmented Reality and holograms, and into OTT/multi-channel.

A World Economic Forum Report in 2016 pointed out that amid the digital revolution the media industry is the sector that has seen the largest scale of disruption of its traditional business model, thus requiring a new skill set.

That report also identified some parameters of a reskilling revolution. Among these are the need for large-scale job transition planning and economy-wide reskilling which affected individuals must understand and be supported, and rewards for job transition pathways. To make retooling real, a wide range of stakeholders should prepare for accelerated structural change of the labour market, and collaborate and pool their resources more than ever before.

Human resource capacity also covers the need for strong leadership.

"Building strong leadership skills among media executives is key to responding to the scale, scope, and complexity of the Fourth Industrial Revolution", according to Mr Atte Jääskeläinen, a specialist in the use of artificial intelligence and digital business models.

This means that leaders "must know what to do; two, have the ability to do it even if there are risks of failure; and three, just do it".

Regulations, ethics, verification, education vs fake news

A second takeaway from the summit is the diversity of approaches to combat the spread of fake news or disinformation.

Prime Minister Hun Sen suggested broadcasters must "strengthen ethics and professionalism to counter fake news, insulting or inciting for discrimination, hate speech, causing



BROADCASTER VOL. 19 No. 3 – Quarterly 3 2019

Published 4 times a year by the Asia-Pacific Institute for Broadcasting Development

PUBLISHER

AIBD

EDITOR

Jose Maria G. Carlos

EDITORIAL EXECUTIVE

Jigme Thinley

CONTRIBUTORS

Philomena Gnanapragasam

Lee Lai Mee

Jigme Thinley

Monica Phang

Fathimath Leeza

Syed Nabeel Hassan Tirmazi

Utpal Kanti Mandal

OFFICE

Asia-Pacific Institute for
Broadcasting Development (AIBD)

PO Box 12066

50766 Kuala Lumpur

Malaysia

Tel : (60-3) 2282-4618

Fax : (60-3) 2282-2761

Email : devbroad@aibd.org.my

Website : www.aibd.org.my

DESIGN, LAYOUT AND

PRINTED BY:

Kentalmas Jati (M) Sdn. Bhd.

1-4-26, Jalan 1-50

Off Jalan Gombak

Diamond Square Commercial Centre

53000 Kuala Lumpur

The views and opinions expressed or implied herein are those of the authors and contributors and do not necessarily reflect the views of the AIBD.

[continued on page 4]



[continued from page 3]

hostility, anger, which may lead to racial controversy”. Part of the effort should be strict enforcement of laws, he said.

Another key strategy is to put priority to the centrality of truth in news coverage and operations amid advances in technologies, some of which have made it almost impossible for audiences to determine real from fake text, videos and photos”, according to Mr Shashi Shekhar Vempati, CEO of Prasar Bharati, India.

“This can be achieved through collaborative effort of media leaders in exploring, for instance, the use of blockchain technology in the creation and dissemination of news so that we present a single operation of truth”, he said.

He called for a “Geneva like convention of sorts where the global community of nations come together and take a stand on preserving the sanctity of truth in media content across borders”.

Mr Abdul Muis Shefii, Director General of Radio Television Malaysia (RTM), Malaysia, offered education and public awareness that can serve as effective weapons to fight fake news

and cybercrimes on the internet and social media.

Media credibility is also important if broadcasters must contain the spread of fake news. Mr Riyaz Sayed-Khaiyum, CEO of Fiji Broadcasting Corporation, recommended to follow set journalistic ethics that includes verifying statement, ensuring a trusted source, showing proof be they recording or documents; avoiding speculative reports and gathering facts, and never trusting social media pages as a direct source.

“For content creators, there is a need to ensure reliability of the source, gather evidence, cross check information, and validate everything with the editor-in-chief”, said Mr Saranga Wijeyarathne, Director General, Sri Lanka Rupavahini.

Aside from verification, Ms Ann Kruger, Bureau Editor, First Draft Australia, stressed the importance of being independent and accountable as journalists to combat false information.

Strengthening regulations was also raised as another approach against fake news. However,

Mr Masato Kajimoto, Assistant Professor, Journalism and Media Studies Centre, University of Hongkong, said dealing with fake news may not necessarily involve regulation

because this may impinge on people’s right to freedom of expression.

“Any regulation also requires a clear definition of fake news”, Mr Masato said.

Technologies should be a force for good

And a third takeaway is a call from United Nations Secretary-General António Guterres in his message to AMS delegates to ensure that new technologies become a force for good as these are ‘sometimes misused to manipulate people and to fuel violence and hatred’. He also said that new technologies must be accessible and affordable, as almost half of the world’s population is still not on-line.

To take advantage of digitisation and new technologies, regional and global cooperation is critical so that broadcasters and other media stakeholders can share their expertise and experiences in the adoption of new technologies, and in the containment of fake news.

No doubt, these AMS takeaways will enable AIBD to identify more relevant training programmes in an evolving media environment and enhance activities for effective adaptation and ingenuity amid the Fourth Industrial Revolution.

Cambodia Seeks Strong Regional and Global Cooperation vs Disinformation

CAMBODIAN Prime Minister Hun Sen recommended several ways to maximise the benefits of the digital revolution and help combat disinformation, cybercrime, hate speech and various forms of discrimination.

Speaking to broadcasters and other media stakeholders during the inaugural ceremony of the 16th Asia Media Summit in Cambodia on 12 June 2019, Mr Hun Sen called for regional and global cooperation in enhancing exchanges in information and experiences on technology development and physical infrastructure building in order to embrace the benefits of the Fourth Industrial Revolution.

He also urged similar collaboration to fight false information and cybercrime happening through media.

"Strengthen law enforcement, ethics and professionalism to counter fake news, insulting or inciting for discrimination, hate speech, causing hostility, anger, which may lead to racial controversy", he said.



Hun Sen, Cambodian Prime Minister.

The Cambodian leader also encouraged media stakeholders to pursue increased professional and technical competencies in order to take advantage of modern technology and face market competition in the digital era.

In his keynote address, Prime Minister Hun Sen cited the benefits of digitisation that led to new discoveries like hyper-connectivity, OTT, AI and large content bank.

"Digital technology substituted the use of analogue technology interns of power, potential quality, efficiency, speed of transmission, data archiving, less use of radio frequency, less production expenses, and emergence of a more dynamic media sector", he said.

Cambodia is preparing for digital migration, which, he said, is planned by 2023.

More than 600 local and foreign participants from 45 countries attended

the two-day summit that examined the theme 'Media Digitisation with a Focus on Developing Markets'.

Welcoming the delegates, Cambodian Information Minister, Dr Khieu Kanharith, urged them to engage in a fruitful dialogue in the summit, which for many years has provided opportunities for broadcasters to examine key media issues in the region. He also wished them an enjoyable cultural visit to ancient temples and museums in the country.

Other key members of the Prime Minister's government also attended the occasion including deputy prime minister, provincial governor and other local government officials.

Don't forget community broadcasting

Mr Sardar Umar Alam from UNESCO, Cambodia, delivered a special address, saying new technologies



Dr Khieu Kanharith,
Cambodian Information Minister.

including Artificial Intelligence (AI) are generating much attention all over the world.

“How will AI affect the digital revolution in media? What is certain is that as AI becomes more embedded in our daily lives, media will undoubtedly be affected”, he said.

In meeting the challenges of the digital revolution, the UNESCO official advised not to forget about community broadcasting. “It must not be left behind in digital terrestrial transition. UNESCO emphasizes the principle of equitable access to frequency spectrum outlined in community media sustainable policies”.

He also said that media plays a critical role in supporting peace and democracy, public access to information and protection of individual freedoms. He said UNESCO believes these freedoms allow for mutual understanding that brings about sustainable peace.

Mr Alam also said that in recent months some governments in the region were blocking or slowing down



Sardar Umar Alam, UNESCO, Cambodia.

access of social media to prevent dissemination of false information in the aftermath of terrorist attacks or large-scale protest.

“The efficacy of such action is not clear. There are concerns of blocking legitimate use of platforms including for journalism”, he added.

He instead called for efforts to increase competencies necessary to navigate the complex and changing social network environment. This includes media literacy initiatives that will enable everyone to require skills to critically evaluate media and its content.



Mr. Fayyaz Shehryar, AIBD President.

DEVELOPING countries or undeveloped markets must pursue cross-sectoral collaboration and increased human resource capacity to ensure effective policies and strategies that will maximise the benefits of digitisation, according to Mr. Fayyaz

Taking Stock of Needs, Benefits of Digitisation

Shehryar, AIBD President, in his message to participants of the 16th Asia Media Summit.

One of the challenges they face is “adequate supply of skilled workers with strong cognitive, adaptive and creative skills necessary for working with the new technologies,” he said.

In his opening remarks at the Summit’s inaugural ceremony in Cambodia, Mr Shehryar identified other challenges developing countries face to be better prepared in capturing the many opportunities emerging as a result of digitisation.

Among them, the identification of the right technological infrastructure, provision for financial resources to adopt digital technologies, and concern on the exclusion of critical voices and knowledgeable stakeholders in utilising digital technologies and big data for development programmes.

He also cited AIBD’s contributions towards building capacity of

broadcasters to understand new technologies and upgrade their skills necessary in the Fourth Industrial Revolution. Among these were the workshops on “Understanding OTT, IBB Technologies and their Value-Added Services,” Telling Compelling Data-Driven News Stories, DRM Digital Radio Implementation and Rollout, Emerging Technologies for Broadcasting and Media; Production to Delivery, Broadcasting in the Age of New Media: Opportunities and Challenges.

Mr Shehryar who is also Director General of All India Radio called on summit participants to help regain people’s trust in media by producing compelling stories.

“We trust that impactful storytelling, truthful storytelling will not be lost when we examine the breadth and depth of technological advances and digitisation in the Asia Media Summit”, he said.

Information Ministers from Asia-Pacific Call for United Stand against Disinformation

INFORMATION ministers from Bangladesh, Cambodia, Myanmar and the Philippines as well as from Korea and Samoa gathered for the Asia-Pacific Sideline Ministerial Meeting on 12 June 2019 in Cambodia to discuss a collective stand on critical media issues, in particular, a way forward in combating the spread of disinformation or fake news across media platforms, and its negative effects on society.

They acknowledged that the spread of misinformation poses difficulties and remains a serious challenge in the region and across the globe.

The meeting took place on the sidelines of the 16th Asia Media Summit from 12-14 June 2019 in Siem Reap, Cambodia.

The ministers and senior officials also agreed to launch the Angkor Fake News Initiative, a year-long research and survey on fake news and its impact on society.

As a follow-through to the Asia-Pacific Sideline Ministerial Meeting in Cambodia, the Information ministers and senior officials also agreed to hold a special meeting of Information



ministers from Asia-Pacific with the participation of key AIBD partners in Samoa this year.

They were unanimous that Asia-Pacific needs a road map to counter fake news, stressing that the region should come together to deal with this phenomenon for the protection of harmonious and inclusive societies.

Aside from measures to combat disinformation, they will also discuss on tackling how best to reach out to communities that have not been benefited by digitisation. Moreover, they will examine the role of and

support for public service broadcasting to be able to serve especially those disadvantaged in society.

Those present in the Asia-Pacific Sideline Ministerial Meeting were Cambodian Information Minister Dr Khieu Kanharith, Bangladesh Information Minister, Dr Muhamad Hasan Mahmoud, Myanmar Union Minister for Information, Dr Pe Myint, Secretary of Presidential Communications Operations Office, Philippines, Mr Jose Rupert Martin M. Andanar, Standing Commissioner of the Korean Communications Commission, Korea, Dr Sam Seog Ko, and the Vice Minister of Communications & Information Technology, Samoa, Mr Lealailepule Rimoni Aiafi. The AIBD President, Mr Fayyaz Shehryar, the Officiating Director of AIBD, Ms Philomena Gnanapragasm and other senior officials from Cambodia were also present.

The ministers and senior officials also decided to use the annual Asia Media Summit as a permanent platform for ministers and media stakeholders in Asia Pacific region to look into other critical media issues including challenges and opportunities in the Fourth Industrial Revolution.

They said they look forward to continued cooperation and support for broadcasting development in the region.



AIBD, UNESCO, 2 Universities to Conduct Research on ‘Fake News’



Dr Ramachandran Ponnaiyandurai, Taylor’s University, Malaysia.

AIBD has launched a one-year research project that will examine the impact of disinformation on public service broadcasters, and gauge the extent of the problem and help understand the situation better.

AIBD Officiating Director, Philomena Gnanapragasm, said the research will eventually be the blueprint for media policy makers to find a way to combat disinformation in the region.

“It will help public service media and private sector media to come up with their own guidelines and a masterplan accordingly. It will also help AIBD plan and develop courses and workshops”, she said.

The research questions driving this project are threefold: one, how do AIBD members deal with the ‘fake news’ phenomenon?; two, how do AIBD members engage with their audiences about ‘fake news’?; and three, what do AIBD members see as their main areas for further development?

The census survey covers AIBD’s 108 members organisations, representing 26 countries in the region.

Taking the lead in this project are UNESCO and two Malaysia-based universities, namely; Taylor’s University and Berjaya University College.

Those directly supervising the project are Dr Ramachandran Ponnaiyandurai of Taylor’s University, Malaysia, and Dr Antoon Gewijde H. De Rycker, Berjaya University College, Malaysia.

Both educators presented details of the research project during the special meeting of CEOs of public service broadcasting organisations in Asia-Pacific on 13 June 2019 after the 16th Asia Media Summit in Cambodia.

In his presentation, Dr Ramachandran, said that fake news’ has outperformed real news.

“Social networks cannot be ignored; their social network

ecosystem is so large that to hire human checkers would be impossible. Technologists, academics and media experts are trying to think up solutions for a very old problem”, he said.

He identified three possible solutions, namely; the hiring of human editors, crowdsourcing, and algorithmic solutions. But the “more manageable use of algorithmic/machine learning vetting is a prospect of the future”.

He said that they are mindful that Asian broadcasters come from diverse cultural and political backgrounds, and foresee resistance from Asian broadcasters to how the term ‘fake news’ is interpreted in relation to local nuances vis-a-vis media freedom.

“Fake news that carries a myriad of meanings, just became larger and problematic. The research will collapse emerging interpretations of ‘fake news’ from the ground up”, he added.

According to Dr Antoon Gewijde H. De Rycker, this research is an attempt to understand ‘fake news’ as a research concept from the Asian broadcasters’ perspective.

“Our transformative-pragmatic research design consists in census surveys distributed among members* of the Asia-Pacific Institute for Broadcasting Development”, he said.



Dr Antoon Gewijde H. De Rycker, Berjaya University College, Malaysia.



Special meeting on combating disinformation or ‘fake news’

Contributed by: **DR. RAMACHANDRAN**, Taylor’s University, Malaysia

“**FAKE** news is menacing Asian societies and destroying democracy”, said Mr. Fayyaz Shehryar, the Asia-Pacific Institute for Broadcasting Development (AIBD) President, at the end of its 16th Asia Media Summit on 13th June 2019 in Siem Reap, Cambodia.

In a ministerial meeting held earlier on the first day of the Summit, Information Ministers from Bangladesh, Cambodia, Myanmar, the Philippines, Korea and Samoa agreed to a proposed conclave of Information Ministers this year who will discuss, among others, measures to address fake news.

A year - long research project, dubbed “The Angkor Initiative”, currently undertaken by AIBD will examine the effects of fake news/ disinformation on its member countries. It is an attempt to understand ‘fake news’ from a research and scientific view point, and its impact on society from an Asian broadcasters’ perspective.

Heads of Public Service Media in the Asia-Pacific region who attended a presentation of pre-test of questionnaires and an assessment of initial findings of the research, have agreed to support AIBD’s research. Mr. Has Sam Ath, Under Secretary

of State, Ministry of Information, Cambodia, recalled that during the 2018 AIBD General Conference held in Colombo, Sri Lanka, he suggested more activities to deal with fake news.

Accordingly, “with support from UNESCO, Jakarta, two Malaysia-based universities are tasked with the research project”, said AIBD’s Officiating Director, Philomena Gnanapragasm.

She also iterated that outcome of the research will help formulate policies, conduct awareness campaign

[continued on page 10]

[continued from page 9]

and subsequent intervention activities to deal with the spread of disinformation /fake news.

Dr. Ming Kuok Lim, Advisor for Communication and Information, UNESCO Office in Jakarta, making reference to a published manual on fake news, said, "our position is, if a law is to be made, it should be carefully

and clearly defined so that it may not be used to stifle freedom of expression and clamp down criticisms or things government may not like".

Mr. Riyaz Sayed-Khaiyum, CEO of Fiji Broadcasting Corporation (FBC), Fiji, said issues surrounding fake news are complex and undertaking a research to understand its nature and impact on society is a 'good start".

The conduct of this research is mindful of AIBD's mandate to achieve

a vibrant and cohesive electronic media environment in the Asia-Pacific region. In order to live up to this expectation, and work together to combat the threat of 'fake news', this research is meant to collect baseline data and insights that can help AIBD in its initiative in engaging with their viewers, listeners and readers in terms of critical digital literacy and 'fake news' in particular.

Ironically, fake news resembles the style of "real news" in many ways. It is media criticism that functions through satire, which captures the critical minds of audience. With more nitizens becoming news creators, more and more unverified information becomes available to audience. Such unverified news conflates several layers of fake news.

So much so, offenders are on the rise among media practitioners and users despite the existence of prohibitive legislation and deterrent punishment in the region, a concern The Edelman Trust Barometer (2018) expressed as affecting society negatively.

Finally, when fulfilling the core obligations of their service, public broadcasters are often faced with challenges and frustrations of dealing with peddlers of fake news, who willfully politicize issues in the arena of psychological warfare.



Make New Technologies a Force for Good - UN Chief

UNITED Nations Secretary-General António Guterres urged broadcasters and other media stakeholders to ensure new technologies are accessible, as almost half of the world's population is still not on-line. At the same time, he said these technologies must be affordable and a force for good.

"...These new technologies and platforms are sometimes misused to manipulate people and to fuel violence and hatred", Mr Guterres said in a message to broadcasters who attended the 16th Asia Media Summit in Siem Reap, Cambodia.

The annual conference with the theme "Media Digitisation: Focusing on Developing Markets" was hosted

by Cambodia's Ministry of Information.

Guterres also spoke of the shrinking of civic space worldwide, saying that anti-media rhetoric is on the rise as well as cases of violence and harassment against journalists, including women.

"We must all do our part to reverse this alarming trend, fight hate speech and false narratives, and defend the rights of the media. A free press is essential for peace, justice, sustainable development and human rights", Guterres said.

He described the conference theme as timely and said he would await the participants' contributions in tackling these challenges.



António Guterres,
United Nations Secretary-General.



AIBD, ASBU Commit to More Collaboration

THE Asia-Pacific Institute for Broadcasting Development (AIBD) and the Arab States of Broadcasting Union (ASBU) have agreed to strengthen collaboration in media training and other media development activities. This was decided during the meeting on the sidelines of the Asia Media Summit in Siem Reap, Cambodia on 13 June 2019.

The ASBU officials, led by Mr Saad Mohammed Aljurais, Adviser to the President of Saudi Broadcasting Authority, Saudi Arabia, and Mr Taleb Kadi Amin, Director of Radio and TV Arab Training Centre, Syria, said the Union remains committed to the AIBD World TV Awards and to more participation from Arab broadcasters in the next Asia Media Summit.

"We look forward to cooperation not just in awards, but also training and everything that will push our media in Asia and Arab world. We are working effortlessly to look for more participation in the AMS from the Arab world," Mr Saad Mohammed Aljurais said.

AIBD and ASBU officials also discussed new areas of possible cooperation that include a workshop on fake news and a co-production project that may cover topics on the United Nations-led Sustainable Development Goals.

Taleb thanked AIBD for the cooperation and coordination extended to ASBU members. He commended the Institute for a successful Asia Media

Summit in Cambodia and expressed hope that a similar gathering can be organised in the Arab world in the future. AIBD and ASBU plan to jointly organise two training workshops this year. They are the training workshops on digital radio broadcasting and integrated broadband technologies.

The Officiating Director of AIBD, Ms Philomena Gnanapragasm, thanked ASBU for its support to the Institute's projects. She also invited ASBU members to participate in the media research on fake news the Institute is pursuing together with UNESCO, in partnership with two Kuala Lumpur-based universities as well as AIBD members.

Mr Saad Mohammed Aljurais said the two organisations can study the possibility of a workshop on fake news as a way to create better recognition of this problem in the region.

"We can decide on something like this in ASBU's Training Centre. ASBU can push this idea about fake news and location, and we can decide which location is convenient for both. I propose that we make this workshop different and gather prominent figures that have influence and come out with results on how to combat disinformation", he added.

Ms Praphaisri Ketsawa, Director of International Relations, NBT, Thailand said they have conducted recently two workshops on fake news.

"We can share the outcomes and our experiences from the two

workshops as well as some TV programmes on fake news," she said.

Ms Philomena said the Institute supports the ASBU's idea on fake news and will work out a workshop proposal for ASBU soon.

Also present in the meeting was Mr Abdul Muis bin Shefil, Director General of Radio Television Malaysia (RTM), Malaysia, who proposed an exchange programme with ASBU.

"ASBU members have programmes, for instance, on religion that we can use, probably in English or with English subtitles", he said.

Mr Taleb said there is an independent group based in Algeria that's involved in this kind of exchange programme. He added that ASBU will work out on this arrangement in coordination with AIBD.

Mr Nabeel Tarmazi, Programme Manager of AIBD, shared a proposed co-production venture between the two organisations. He suggested that ASBU can identify a topic of interest and AIBD can work out the production.

"AIBD can recruit a team and involve several countries for co-production but with consultation from ASBU. This can be both in English and Arab language; perhaps sustainable development goals can be a possible theme".

This AIBD/ASBU Partnership Committee Meeting is held during the AMS every year to discuss joint media activities organised by the two organisations.

World Television Awards 2019



WINNERS of the World Television Awards (WTA) was announced in the Awards ceremony in Siem Reap, Cambodia. The event took place right before the closing ceremony of Asia Media Summit 2019.

WTA had two categories, and this year the focus was on the most relevant issues in the respective areas, which was 'Technology and Humanity - The Impact' for the Category Humanity, while the Category Science and Environment sought to focus on pollution with the aptly titled 'Taming the Sea of Plastic'.

The ceremony was graced by the presence of Honourable Minister of Information Cambodia H.E Dr Khieu Kanharith.

The ceremony began with Mr John Maguire, Director of International Relations and Cooperation France Médias Monde, who served as the chairperson for the jury session, by giving an overview on the judging and the entries for this year. During his speech he remarked upon the necessity of such awards and for the participants to follow the brief of the categories.

Arab State Broadcasting Union (ASBU) was the main sponsor of the Category Humanity. Mr Taleb Kadi Amin, Director of Arab League Arab States Broadcasting Union, Radio and TV Arab Training Center, delivered a speech on behalf of Mr Abdul Rahim Suleiman, Director-General of the Arab States Broadcasting Union (ASBU).

The 1st place was won by MediaCorp, Channel News Asia, Singapore for the documentary 'Becoming Human: Coding Morality'. Mr Chong Yew Meng who is the programme's producer was presented the Awards' trophy and certificate by Mr Saad Muhammed Al Juarias, Vice Chairman of ASBU.

Honourable Minister of Information, Cambodia, presented the award and the certificate for the winner of the Category Science and Environment. The Best TV Programme for this category was won by "Plastic Earth" produced by Mr Chul-hoon Song from KBS 1 from Korea. This category was sponsored by the LG Uplus.



THE RUNNERS-UP FOR THE WORLD TELEVISION AWARDS ARE:

Category Humanity:

Astropreneurs:

To the Stars & Beyond by Inez Ana, MediCorp, Singapore

Category Science and

Environment: Trash Hero Thailand, Tlejour by Prasan Ingkanunt, Thai PBS from Thailand

AMS Pre-Summit Workshop



Building Leadership Skills to Meet Demands of the 4th Industrial Revolution

BUILDING Leadership Skills to Meet Demands of the 4th Industrial Revolution Building strong leadership skills among media executives is key to responding to the scale, scope, and complexity of the Fourth Industrial Revolution in which disruptive technologies and trends are changing the way people live, work and relate to one another, said Mr Atte Jääskeläinen, former Director of News and Current Affairs at Finnish Broadcast Company, YLE, and Senior Advisor at Fourkind, an advisory company on artificial intelligence and digital business models.

This means that leaders “must know what to do; two, have the ability to do it even if there are risks of failure; and three, just do it”, Mr Jääskeläinen told broadcasters and other media stakeholders attending the AIBD/EBU Academy Master Class on Leadership in the 4th Industrial Revolution in Siem Reap, Cambodia from 10-11 June 2019.

“Nothing happens if you don’t use your abilities in practice. Understanding leadership is not enough if there is no visible change in your leadership”, he said.

To be a great leader, he said, one must understand that “leading is about people”, stressing that “all leading is communication, and all communicating is leading”.

He added that communication skill is a fundamental tool of a leader and

whatever he does is communication that people observe as he operates as a leader. He also said that all leading is influencing people, and to be successful, the leader must know his people and their personalities so that he can fit the way he communicates with them.

A Professor of Practice at LUT University Finland and a Visiting Fellow of the Reuters Institute at Oxford University, Mr Jääskeläinen, said the new media environment needs leaders who can inspire and empower people in a way that people are willing to give their best to the organisation.

In his presentation, he identified differences between a manager and a leader. He said a “manager focuses on systems and structures, while a

leader focuses on people. A manager asks how and when, while the leader asks what and why”. He also stressed that a “manager does things right and a leader does the right thing”.

Nineteen participants from 10 countries in Asia Pacific attended the two-day workshop with Mr Jääskeläinen serving as its consultant.

The workshop examines what is leadership and the need to learn it, types of leadership styles and emotional intelligence, and attributes of a good leader, among others.

Ms Leeza Fathimath, AIBD Programme Manager, welcomed the participants and expressed gratitude to EBU Academy for offering broadcasters in the region the opportunity to build human resource capacity in leadership.



Journalists Should Do More to Verify Content Amid Disinformation



JOURNALISTS need to do a lot more to verify and filter content from social media they may use in order to combat the spread of misinformation, disinformation and mal-information, said Ms Ann Kruger, Bureau Editor, First Draft Australia.

“Media practitioners need to pursue more responsible journalism and clear things out so that people get real information”, Ms Kruger said as she addressed broadcasters and other media stakeholders attending the Pre-Summit Workshop on Combating Disinformation/Fake News at Siem Reap, Cambodia on 11 June 2019.

First Draft is an organisation that supports journalists, academics and technologists in meeting challenges related to trust and truth in the digital age. It hosts a global verification and collaborative investigation network, and conducts researches and training programmes on best practices in journalism.

In her presentation, Ms Kruger stressed that verification is a process that requires asking questions to fact check information, visuals and captions.

These questions, she said, include provenance - are you looking at original piece of content?: Source - who captured the content?: Date: when was content captured?: Location - where was content captured?: and



Motivation - why was the content captured?

“Verification is hard work, but there are tools that are available to ensure every bit of information is correct. Sometimes truth comes out later so we need to research more”, she said.

Ms Kruger also stressed the importance of being independent and accountable as journalists to combat false information.

Journalists should make a conscious effort to be free from control from different parties or any agenda, and also be transparent. This means being accountable which requires that journalists admit error and apologise for any false information published.

“It is also not enough to describe content as simply fake news; we need

to be more precise as to the types of information disorder”, she said.

There are three kinds of information disorder that can be classified. She said these are disinformation or information that is false and deliberately created to harm a person, social group, organisation or country; misinformation or information that is false but not created with the intention of causing harm; and mal-information or information that is based on reality, used to inflict harm on a person, social group, organisation or country.

Thirty-two participants from 13 countries joined the day-long workshop where Mr OUK Kimseng, Undersecretary of State in Ministry of Information, Cambodia, also spoke on education and regulation initiatives to check hoaxes on social networks.

AMS Pre-Summit Workshop



Unlocking One's Creativity to Produce Impactful Content

MR Steve Ahern, Chief Executive Officer of AMT Consultancy Pty Ltd, Australia, talked on creating compelling new media content that starts with unlocking one's creativity.

"Creative people never accept the first answer and think of lots of alternatives", Mr Ahern told participants attending the AIBD/Radiodays Pre-Summit Workshop on Creating Impactful Content in the Digital Era held in Siem Reap, Cambodia on 11 June 2019.

In his presentation, Mr Ahern urged broadcasters "to clear their mind from the daily grind, forget their business and focus more on the customers". He said it is important to find out what the customers' problem is and how this can be solved.

In unlocking one's creativity, Mr Ahern also suggested to keep drawing and doodling.

In writing, he told broadcasters to just start writing, even if this is rubbish until the right thing comes.

"Go for a walk and think about the idea first... don't sit and type. Use a stimulus... capture first words", he said.

He also said that when thinking creatively these days, broadcasters must think across all platforms.

Identifying Audience Needs for Impactful Content

Another speaker was Ms Gemma Hayman, Country Director, BBC Media Action Plan, Cambodia, who spoke about the production of impactful content to achieve positive human development outcomes.

She presented two case studies in Cambodia that use media and communication for this purpose. These are 'Klahan9' that uses social media to improve young people's employment

prospects, and the other is 'Neighbours Together' which helps build resilience to the effects of climate change.

Both programmes are supported by BBC Media Action Plan and the Swedish government, in partnerships with local NGOs, media and government.

In her presentation, she cited the importance of both quantitative and qualitative research to understand audience needs to be able to produce impactful content in specific media platforms.

"We go beyond providing information. We want to know how people feel and think so that we can help them change behaviour", Ms Hayman said.

At the end of the workshop, participants shared their takeaways from the presentations and discussions. About 20 participants from Asia Pacific attended this one-day workshop



Enabling Traditional Media with Latest UHD Solution

By **UTPAL KANTI MANDAL**
Programme Manager, AIBD

IN view of the development that are taking place in 4K UHD Television arena, AIBD in collaboration with M/S ADINNO conducted one-day pre-summit workshop on “Trends in 4K Technology” on 11 June, 2019 at Siem Reap, Kingdom of Cambodia. The workshop highlighted the production and distribution of 4K content and how the image quality is enhanced with UHD cameras and production equipment.

Dr Amal Punchihewa, Distinguished Lecturer of IEEE Broadcast Technology Society and Mr Gordon Gu, CEO of ADINNO were the expert consultants. The experts talked on technical parameters of UHD, including UHD-1 and UHD-2, end to end solution for UHD content, production, distribution, streaming and/or broadcasting and display devices.

On the first session ‘UHD Demystified’ Dr Amal introduced UHD Television to the participants with various standard, parameters, their impact on picture quality etc. Concepts of user experience (UX) and Quality of Experience (QoE) were explained to them in relation to end to end media value chain. He told 5G and 8K are two next-generation technologies that are pushing forward the envelope of innovation for video experiences. In the near future, 5G is expected to play a role in the delivery of mobile video content. Possibility of delivering live, catch-up TV and VOD content in pristine 8K to TVs and mobile devices using 5G networks.

Dr Amal briefed about High Dynamic Range (HDR) and Standard Dynamic Range (SDR), Influence of



HDR on capture and display and HDR eco system as a whole. He discussed UHD-1 delivery of DVB-T2 and ATSC 3.0 systems and also satellite for UHD-1 delivery. Before the practical demos in subsequent sessions the basics of UHD 4K was well elaborated.

The subsequent sessions of the day were covered by ADINNO expert Mr Gordon Gu along with his colleague Mr Chao Jun Du with the theme “New Opportunity – New Media & 4K/8K-4K Universe UHD channel cover European market and more”. ADINNO Inc, located in Beijing, Shanghai, Bay area USA, is the leading 4K/HD end to end solution provider to worldwide Mobile/ Fixed operators & Cable TV/ IPTV etc. offering 4K UHD based Contents and Production and OTT/ IPTV platform.

Mr Gordon talked about 4K UHD HDR and SDR and HFR/WCG citing that the technical parameters of UHD systems include higher image resolution, higher image frame rate (HFR), higher image dynamic range

(HDR), wider colour gamut (WCG), and advanced sound system technologies. The intent of a combination of all these enhanced parameters is to provide a more “immersive” and better experience for the viewer. Mr Gu covered the following area elaborately.

4K Contents: One of ADINNO’s investment portfolio-4KUniverse Inc. is the first one offering 4K 7x24H channel in USA with Hollywood 4K UHD video/ film, Partners with SES/ Amazon Fire TV/ European Swisscom, etc.

For the better understanding and visualization of 4K studio and 8K studio production, Demos were set up in the classroom and experts explained every element in details benefiting the participants. Twenty-one participants from 10 countries Cambodia, India, Laos, Malaysia, Maldives, Mozambique, Nepal, Srilanka, Vietnam and Thailand attended the workshop. Overall satisfaction level of the participants was very high as per feedback received.

AMS Pre-Summit Workshop



Some 30 participants representing Afghanistan, Bhutan, Cambodia, India, Macau, Malaysia, Myanmar, Nepal, Pakistan, Papua New Guinea, Thailand, Sri Lanka and Vietnam attended the 1-day workshop. It was crafted at introductory and intermediate level taking into considerations of the required and latest technologies available to create novel and effective ARVR experiences.

Impact of AR/VR on Media

By **MONICA PHANG**
Programme Manager, AIBD

THE Augment Reality & Virtual Reality (AR/VR) industry has come a long way since it first came to prominence slightly over a decade ago. In just the last two years, a new term, XR (Extended Reality) has emerged to encompass both Augmented Reality (AR) and Virtual Reality (VR), and includes Mixed Reality (MR) as well.

Dr Andrew Yew said AR, VR and MR are essentially a new paradigm of computer user interfaces. However, the implications are far more than just

a new way of using computers. Since the dawn of the digital age, computers have proven to be indispensable to almost every aspect of society and XR is thus seen by many as a fundamental paradigm shift in the evolution of society.

How does this related to broadcasting?

Like all other industry, verticals where digital technology forms the bedrock of how these industries function, XR

enables seamless and barrier-free information communication between digital systems and human users.

For example, whether it is communication between a brand and its consumers (e.g., advertising, product information, brand messaging, etc.), a corporate computing system and the users (e.g., core banking system and the bank tellers, administrators and engineers), or a broadcasting network and its audience (e.g., sports broadcasts, concerts, TV programs, live event coverage, etc.).

The same principles apply, regardless of industry and application and there are a few broadcasting-specific innovations that make use of XR concepts and technologies. XR is a human-centric discipline, and research has shown that people always need engaging content, regardless of whether it is for work or entertainment.

He also shared his knowledge on How to Design XR Experiences and the Technologies that are Elevating the Possibilities of XR as follows:

Volumetric capture is the use of an array of cameras surrounding the subject in order to capture a 3D representation of it. Volumetric



capture studios are able to capture full motion of human actors, even animals and props in 3D, or free viewpoint format, and can thus be viewed from any angle and distance. The free viewpoint data can be used in games, AR or VR experiences, and even in movies where the ability to control the camera freely after the performance and add 3D elements and VFX easily is invaluable.

Ambisonic audio capture is the technology for capturing spatially registered audio using a special ambisonic microphone. This has been used for capturing music performances where spatial data of the sound is recorded. Combined with a VR or 360 recording of the performance, this allows the user to walk around the stage and experience the performance from any position and orientation.

The **Leap Motion** is a device that tracks fully articulated hand and finger motion, allowing the user to grab and manipulate virtual objects in 3D freely and intuitively. Combined with an AR headset, such as **Project North Star**, highly futuristic applications and games where a mixture of physical and virtual objects and directly manipulated by the bare hands of the user can be achieved.

The **Ultrahaptics** device is an array of ultrasonic transmitters that creates haptic feedback in mid-air, allowing the user to touch and feel virtual objects in mid-air. Combined with an AR or VR headset, it adds another level of immersion where previously, the user could only see and hear virtual objects, now the user can also touch it.

Fairy Lights in Femtoseconds, a research prototype by a team of Japanese researchers demonstrated true holographic projection, using femtosecond lasers focused on points in mid-air to ionize air molecules, causing them to emit light. Different 3D shapes were demonstrated, and even more amazingly, the light also provided haptic feedback to the touch.

Camera tracking technology is essentially what most AR technology is based on. And it has been applied in the broadcasting world in more frequently. During the last New Year's countdown concert held by MediaCorp, they employed camera tracking



technology to render a virtual mermaid swimming around the physical concert in real-time.

Visible to viewers at home and to the concert audience on big screens, it caused quite a stir. Camera tracking is also being used by some TV stations in the United States to provide immersive weather and news reports, and sports punditry with match statistics and analysis populating the studio in 3D together with the host and pundits.

A more personal application of camera tracking in the world of television broadcasting is the use of the TV images as an anchor for 3D

graphics to appear around and out of the TV screen. Using the user's mobile phone as a viewer, live TV programs can be used as a gateway to access full 3D content populating your living room. An example use case of this is the depiction of a football field and players in 3D in front of the TV while the match is broadcast on TV.

Artificial intelligence has been used in a multitude of ways. One of these is in real-time human pose estimation that has opened up loads more possibilities in how humans can interact with computers intuitively and seamlessly. Example, a research team from the University of Washington employed artificial intelligence to generate a 3D representation of football matches from 2D videos, allowing users to view and immerse themselves in 3D matches, seeing players up close and gaining a better spatial understanding of the football field from a tactical standpoint.

The goal of XR is to render the hardware and user interface practically invisible to the user and the applications are so easy to use and interact whereby the hardware is no longer noticeable. This allows users to focus on the task, not the interface. With this one fundamental truth about XR, we believe that XR is the way forward for mankind to finally leverage digital technology to the fullest.

Q&A with Tshering Wangchuk, CEO, Bhutan Broadcasting Service (BBS)

IN an attempt to highlight our member organisations Broadcaster Magazine will feature heads of the organisations in every edition from now on. It is a new initiative so that their ideas and initiatives could be reached out to other member organisations, and possibly share and discuss. It will be a Q&A format. In this edition The Broadcaster caught up with the CEO of Bhutan Broadcasting Service (BBS).



Broadcaster: Tell us, briefly, about yourself and your career.

Mr. Wangchuk: After resigning from the government in 2003, I joined a friend and started a small media house catering to designing logos, pamphlets, books and websites. This led to starting the country's first business newspaper Business Bhutan newspaper in 2009, which I headed as the founding CEO for about 3 years. I left the newspaper a year before I joined as CEO of the Bhutan Broadcasting Service (BBS), the national television broadcaster. This makes me the first and only Bhutanese to have headed print media, radio and television. Outside the office I remain physically active playing soccer, riding mountain bikes, volunteering for social service and I do read a lot of books too.

Broadcaster: What are some of the challenges facing the media in Bhutan?

Mr. Wangchuk: The media in Bhutan, especially the private media, is in a nascent stage. Hence, there are teething problems with regard to professionalism among the practitioners on one hand, and the understanding of media among the public. But this seems to be not just a case for Bhutan but it seems to be a shared problem the

world over; even in countries where media has existed for more than a century. However, one problem that we are facing is the increasing number of people leaving the organizations to study and work abroad. It started few years ago and there is no sign of it stopping at the moment, and it is a challenge we find difficult to resolve considering the constraints in resources that we are facing.

Broadcaster: As the CEO of the national broadcaster, what are your plans and priorities to overcome these challenges?

Mr. Wangchuk: Capacity building is one solution to enhance professionalism among the practitioners. Media literacy is an option to enhance understanding of media among the public. Further, we are encouraging programs that engage the audience. Lastly, despite the constraints improving working conditions, perks and opportunities for trainings and studies are few areas that we are looking into to retain the employees.

Broadcaster: Bhutan is hosting the GC 2019. What does this mean to Bhutan and BBS?

Mr. Wangchuk: As the biggest gathering of broadcasters and personalities to be held in Bhutan so far, the AIBD GC will be historic for both Bhutan and BBS. Bhutan remains unknown to most parts of the world and this will be the perfect opportunity to bring Bhutan to the world, especially in the Asia-Pacific region. And how can we do it better than by bringing together the media personalities.

Broadcaster: What are your thoughts on AMS in Cambodia this year? What do you think should the next AMS be focusing on?

Mr. Wangchuk: I was in Siem Reap, Cambodia to attend the 2019 AMS. The AMS was a great success with record participation, and despite the AIBD having a new president and working with an acting director. Much appreciation to the ministry of information of Cambodia, and the AIBD team for the big success. Further, it was interesting to attend sessions on Fake News and New Technology at the AMS.

Broadcaster: As you might know AIBD is undertaking numerous activities in the region. What are some of the areas that BBS would like to enhance?

Mr. Wangchuk: The BBS appreciates the kind assistance that it receives from the AIBD. However, we would like to see more offers for more trainings (ex-country and in-country) and workshops in fields associated with television and radio broadcasting. Further, the BBS can benefit from experts – with AIBD assistance – who stay in Bhutan for a longer duration for specific tasks.

Cambodia Calls for More Media Responsibility amid Spread of Fake News

"AMID the spread of fake news, media must exercise greater responsibility while we pursue more media literacy efforts", Cambodian Information Minister Dr Khieu Kanharith said.

He admitted that combating fake news remains a challenge in the country where the use of internet and social media has dramatically increased. In his presentation during the Asia Media Summit in Cambodia, he said the use of social media has become more popular lately with about seven million Cambodians having their Facebook accounts.

Based on figures from the Telecommunication Regulator of Cambodia, the minister said, the use of mobile phones has also been widespread. "The number of sim-card users is over 19 million or equivalent

to 117% of the total population. About 82.61% of the country's population of 16 million has mobile broadband. Six mobile internet service providers are operating in the country".

The Minister said Cambodia does not impose restrictions on the use of the internet and social media.

"Everyone can create an account and use it right away; sharing information among people and relating their own stories, express self-opinion", he said.

However, he emphasised that the government can take legal action against those who disseminate content in text, audio, picture, video and/or other forms intended to damage its national defence, national security, economy, public order, and national culture and traditions.



Dr Khieu Kanharith

Minister Kanharith spoke at plenary session 1 on 'How We can Adapt to the Digital Revolution' together with five other information ministers from the region.

Media Urged to Invest More in Research, Innovation, Training

THE information minister of Bangladesh, Dr Muhammad Hasan Mahmoud, urged broadcasters to deal with the digital revolution by investing more in research, innovation, and training.

He also proposed to strengthen measures to protect freedom of expression and called for collaboration among states across borders to fight cybercrimes.

In his presentation during the 16th Asia Media Summit's plenary session on "How We Can Adapt to the Digital Revolution", the minister said a digital Bangladesh is now a reality in the country that requires investing in infrastructure and human resource capacity building.

"We face some challenges to cope with the impact of digitisation. Digital technologies keep upgrading and this becomes more expensive. We also need highly skilled workers. We also must study the infusion of artificial intelligence that replaces human presence", he said. Mr. Lealailepule



Dr Muhammad Hasan Mahmoud



Mr Lealailepule Rimoni Aiafi

Rimoni Aiafi, vice-minister for ministry of communications and information technology (MCIT), Samoa, also spoke at the plenary session, pointing out the challenges and opportunities facing the media industry in the country.

He said amid the digital revolution, media has to deal with limited capacity and capability developments programmes for journalists, shortage of well-trained technicians, the rapid growth of online social media, fake news and hate speech.

"We also need to address cybercrime like identity theft, scams on social media through social engineering", he added.

He said Samoa has a large, diverse and dynamic media industry composed of public and private broadcasters, print outlets and online media which enjoy freedom of speech as a fundamental right. He added they are protected, but with limitations. Samoa launched a government-wide area network called the Samoa National Broadband Highway (SNBH) in 2014 and the Tui-Samoa submarine cable in 2018 that promises to deliver faster, reliable and more affordable internet services.

"All these government developments will bridge the digital divide in Samoa and enable digital revolution towards sustainable digital economy, not only to build local and international market but also to provide the platform for education and awareness, resulting in well informed citizens", he said.

Innovative Technology - A Key to Korea's Response to Digital Revolution

TO meet changes in the global media environment and respond to the digital revolution age, Korea will spread 'Hallyu' or the Korean wave to include k-pop, drama and games, establish a Korean content distribution platform and strengthen its status as a leading country in 5G technology, according to Dr Sam Seog Ko, Standing Commissioner of the Korean Communications Commission (KCC), Korea.

"We will expand our global market centered on Korea wave content through media-commerce convergence. This means expanding the source with our own IP to connect with a wide variety of markets and spread commerce with videos that are fun and have stories through social media and You Tube", Dr Ko told participants of the 16th Asia Media Summit in Cambodia.

Speaking at the summit's plenary session 1 on "How We can Adapt to Digital Revolution", he said Korea will also utilise capital from global companies such as Netflix if necessary to promote 'Hallyu' content.

To support efforts in establishing Korean content distribution platform, he said that the largest K-Culture Festival in the world held by CJ Group will continue every year.

"We will also combine conventions and concerts with cultural content such as K-pop, K-drama, and K-Movie, as well as all 'Hallyu' themes including IT, fashion, and beauty," he said.

He added that they will pursue OTT services in combination with terrestrial (KBS, MBC, SBS) and mobile carrier (SKT) to advance into its global market, as well as mutual investment plan for OTT content production with SKT and Singtel.

Korea will also promote national strategy to become "world's best, beyond world's first" in 5G while actively supporting in fostering new 5G-based industries and revitalising the private-led market.

It will also support the promotion of 5G content market-support leading projects in 5G killer content like hologram, and VR shopping.

Dr Ko said innovative strategies need to consider the changes in the global media environment, among them; the increasing number of mergers and acquisitions between media companies, significant capital mobilisation of global companies such as YouTube and Netflix to enter overseas markets, advertising decline in traditional media, and personalisation of content consumption.

In closing, Dr Ko gave this piece of advice to participants, "Embrace growth through innovative technology that pursues innovation and growth but maintains a human-centred stance is the new national strategy in the digital revolution age".



Dr Sam Seog Ko



Mr Jose Ruperto Martin Andanar

PHILIPPINE Communications Secretary Jose Ruperto Martin Andanar said broadcasters adapting to new technologies should keep in mind that what is important is "the story, the narrative, the content of the report that we write and speak".

"Let me repeat: content is primordial -- be it for news or for

Content is Primordial amid Advanced Technologies

entertainment", Secretary Andanar told participants of the 16th Asia Media Summit held in Cambodia.

In his presentation during the plenary session on "How We can Adapt to the Digital Revolution", the Information Secretary said content for news is based on the truth, on facts that are verified, on data that is confirmed.

He added that entertainment, on the other hand, is based on the creativity of the imagination.

"Drama, comedy, or a mixture of both, revolve around every conceivable facet of life. Nonetheless, a moral ground must be at its base, as a foundation of values, either traditional or contemporary", he pointed out.

Mr Andanar also stressed that technologies may influence how one lives, works and communicates, but

it is still the human person that can make a difference in his life.

"New technologies will always be advancing, well beyond our capabilities to decipher, the increased complex operations of the zeros and the ones in our computers. The state-of-the-art instruments we use for communication and information dissemination may be transforming the manner of transmittal, but it is only you and I, all of us, who can undertake the transformation of our lives", he said.

He called on broadcasters who may be apprehensive about the magnitude of the scientific progress to be firm and use the power of their individual and collective minds to control the instruments they deploy to achieve the ideals of peace and understanding, among the nations of our region and the world.

Myanmar Cites Positive Impact of Digitisation, Social Media



Dr U Pe Myint

MYANMAR Union Minister for Information Dr U Pe Myint highlighted the positive impact of digitisation and social media as the country moves towards a digital economy.

He warned, however, that social media has become a breeding ground for false information.

Dr Myint spoke at plenary session 1 on 'How We Can Adapt to Digital Revolution' of the 16th Asia Media Summit held in Siem Reap, Cambodia on 12 June 2019.

In his presentation, he said people of Myanmar are enjoying the freedom that was curtailed in the past. They now use social media to express and share their feelings and opinions, even criticisms against the government, which benefit society in general.

"Another positive thing about social media is that users have developed this habit of listening to others, getting practice to improve themselves by hearing other views. Also, it helps people become digital literates in a much easier way. Social media can be a persuasive learning tool," he added.

People are also becoming entrepreneurs, he said, as they engage in online shopping, allowing them to sell all kinds of merchandise.

He said the most prominent manifestation of the digital revolution in the country has been the use of social media, mostly Facebook. "There

are around 21 million social media users or about 40% of Myanmar's total population of 54 million. Telecom reforms are also in place that have enabled increased mobile penetration. Based on Hootsuite's We are Social, mobile subscriptions have reached 56.57 million or 105% of the country's population".

Dr Myint said much remains to be done for the country to catch up with digital technology and move towards a digital economy.

The government has drawn the Master Plan for e-government from 2016-2020. It has also launched the Myanmar National Portal in September, 2018

He said that the e-governance master plan will be implemented by various ministries in cooperation with the private sector.

"We need digital infrastructure and trained personal and major investments. This will require time and resources, and we need the cooperation and collaboration between government, private sector and citizens", he added.





Broadcasters Urged to Know their Audiences Well



SUCCESS of broadcasters in the digital age requires knowing their audiences and consumption behaviour well, one of four key steps to ensure their audiences believe in their products and services, according to Mr Klaus Bergmann, Head of International Relations at Deutsche Welle, Germany.

Speaking to participants of the 16th Asia Media Summit in Cambodia, Mr Bergmann said broadcast networks must know what devices their viewers use and find where they are in order to tailor programmes to their needs.

"There is also the need to improve digital quality of programmes and stand out amidst competition, and increase engagements between journalists and target groups," he said.

In his presentation at plenary session 2 on 'Envisioning the Media in the 4th Industrial revolution', he

shared some best practices to include creating new formats in programming, new ways of storytelling and using artificial intelligence-based technology to reach out to young people.

A reskilling revolution

Another speaker was Ms Nathalie Labourdette, Head of Training, European Broadcasting Union (EBU) who emphasised the need for a new skill set to sustain public service media legacy.

Citing a World Economic Forum (WEF) Report in 2016, Ms Labourdette said that amid the digital revolution the media Industry is the sector that has seen the largest scale of disruption of its traditional business model.

The reasons for this are varied, she said, among them, insufficient understanding of the disruptive

changes and lack of alignment between workforce strategy and innovative approaches.

"Firms can no longer be passive consumers of ready-made human capital. They need to invest, collaborate, and allow for cognitive diversity", she said.

In her presentation, Ms Labourdette outlined the WEF conclusions on the parameters of a reskilling revolution;

1. Individuals' mindset and efforts will be key
 - large-scale job transition planning and economy-wide reskilling
 - individuals will need to be supported
 - need to see the benefits of continuous reskilling in the form of rewarding job transition pathways.
2. No single actor can solve the job transition and reskilling puzzle alone
 - Make reskilling real
 - Prepare for accelerated structural change of the labour market
 - a wide range of stakeholders—governments, employers, individuals, educational institutions and labour unions, among others—will need to learn to come together, collaborate and pool their resources more than ever before.

Integration of Latest Technologies in Content Creation

By **UTPAL KANTI MANDAL**
Programme Manager, AIBD

TECHNOLOGICAL advancements continue to transform broadcast media industry and content creation techniques. Digital content platforms have understood that the future lies in the hands of creative content. We have been talking about improved picture quality of content for some time. Ultra High Definition Television content production are very much in place in some developed markets.

Recent major sports coverages were done using both UHD-1 and with high frame rates (HFR) as well as High Dynamic Range (HDR) wide colour gamut (WCG). Integrated Broadcast-Broadband (IBB) technology engines can now support UHD and HDR. Future workflows will cater to various audience segments and device profiles.

Media production organisations are deploying technologies to maximise the utilisation of production facilities as the production equipment becomes obsolete in a shorter time. With the standardisation and adoption of SMPTE 2110 future facilities are expected to be more agile.



In the 16th Asia Media Summit (AMS-2019), one technology session was dedicated on the topic "Integration of Latest Technologies in Content Creation". Five distinguished speakers from diverse technology arena presented their view points in the latest trends in content creation. Mr Ale Raza, Director of Whiteways Systems Pte Ltd Singapore moderated

the session facilitating the speakers to disseminate balanced technology updates in media content creation. This session addressed the opportunities and challenges posed by AR, VR, UHD, HDR, HFR, WCG and IP in production and immersive media experience in both audio and video.



The first speaker of the session Mr Bala Murali Subramaney, Chief Technology Officer Astro Radio Sdn Bhd Malaysia talked about the availability of latest technologies in radio set up and trends for implementing them in real situation. He presented case studies on radio studio set up required in News Department and another case study of 'On Air Studio'.

Mr Bala explained that from a creative perspective, the radio station of the future's emphasis will be in delivering 'watchable' radio content. The talent (announcer) will be both heard and seen on multiple social media platforms.

Compelling multimedia video content from the on-air studio – created, produced, packaged and delivered effectively – will become the focus of radio stations. He also told that the heart of the radio studio operation is the mixing console.

A thorough understanding of the console's operations is critical. The future console will be compact yet intelligent & easy to use and will have fewer buttons, faders and fully automated. There will be less human

interaction with Radio Console and it will free up time for the announcers to focus on delivering other compelling content. Also there will be provision for enabling the announcers to incorporate web-content into their shows on-air and on-line.

Mr Bala detailed on the automation system of the future which will be driven by the Radio Automation Software having ability to integrate to other systems via TP/IP, DMS, Dante, Ravenna and other protocols. VOIP System with Virtual screen, 4G and 5G Data based – Studio Telephone Hybrids, WhatsApp, Viber, WeChat and Messenger based calls into radio studio will be regular feature in future.



The second speaker Mr Gordon Gu, Chief Executive Officer ADINNO INC talked about 4K content creation and related production equipment like 4K Encoder, 4K OB-VAN, 4K All in one internet Box, 4k Event Production Wireless Transmission and Monitoring System Platform.

He explained that SEEi-4k Encoding transmission server adopts real-time 4K UHD HEVC encoding technology, which has lower power consumption compared to software encoding scheme, and uses HEVC/H.265 encoding, which reduces the bit rate by nearly 50% compared to H.264 encoding of the same quality video stream, and achieves better video picture quality with the same bandwidth.

4K encoding transmission server is a product tailored for new media processing applications. It supports the encoding processing capacity of 4K/60P Main10 HEVC/ H.265 at the broadcasting level, and the power consumption is less than 35W. 4K encoding transmission server supports additional 4K acquisition function having interfaces HDMI, DP and 4-way 3G-SDI. He described 4K/HD OB VAN which can meet 4-12 channel HD or 3 channel 4K ultra HD, the production system can undertake conferences, outdoor activities, variety shows, small recording and live broadcast requirements for TV shows such as sports events.

4K All in one internet Box is One Box machine to complete the video broadcast, broadcast switch, recording, subtitle superimposed, multi-screen and other functions. Mr Gordon also introduced SEEI. TV 4K OTT platform through which consumers expect a flawless viewing experience and instant access to high definition video content on any screen.



Mr Toni Fiedler, General manager- Fraunhofer Institute of Integrated Circuits (IIS) presented features and developments in MPEG-H Immersive Audio System and standardization. Mr Toni mentioned that Fraunhofer IIS is the main inventor of mp3 and co-developer of (xHE-)AAC, MPEG-H Audio and EVS. He provided the latest developments in standardization about MPEG-H audio system and its merits. Broadcast is in Transition from HDTV to UHDTV and Broadcasters and Telcos compete for frequency spectrum for upgrading the TV Standards to 4K/ 8K Video and 3D Audio.

MPEG-H is a choice in all relevant TV standards worldwide. Introducing MPEG-H with UHDTV make use of rich features step by step for producing 2.0/5.1, second language, mix preset, 3D Audio, multiple objects and interactive objects. He explained that speed of adoption is up to the broadcaster and additional equipment can be integrated when needed and surely huge variety of creative features in the content will attract TV viewers.



Dr Andrew Yew, Co-founder & Chief Technology Officer- Ministry Asia Sdn Bhd Malaysia spoke on the creation of content in Augmented Reality (AR), Virtual Reality (VR) and Mix Reality(XR). While explaining the Principles and Technologies of Content Creation for XR, he told that XR is a concept whereby the reality of the user is mediated and augmented by different technologies, hardware and software.

It is a paradigm shift in human-computer interaction that is revolutionising every industry. The user experience that can be achieved is virtually limitless, making it a challenge to craft truly effective applications. In his talk, he described the principles behind optimizing user experience design for XR applications and the corresponding methodologies for creating XR content.

Mr Chy Sila, CEO and Founder of Sabay Digital Corporation- Cambodia, in his talk provided details about what his company is doing as content creator. Sabay is a premier digital content producer in Cambodia, with an aim to educate, inform and inspire the Cambodian population with awesome daily online content. He said the Sabay



Group is made up of many smaller parts, providing varied digital products and services across the board.

Cambodia is an exciting country with a dynamic youth community eager to play an active role in the digital era. Sabay Digital Corporation was formed to help meet this demand, with new services and products including online content and mobile entertainment. Sabay is a forward thinking pioneer and has been the first to introduce online gaming, unified SMS content and original online entertainment (news, movies, music and TV) in the Kingdom of Wonder.

Sabay Web was created for providing combination of breaking news and unlimited entertainment focusing on important news related to youth. The primary objective of the webpage news.sabay.com is to provide main contents such as entertainment, life, society, technology and sports. Mr Chy Sila mentioned that Sabay.com is aimed to be a melting pot of ideas, opinions, gossip, experiences, where the youth gather to gain and share information and knowledge.

Sabay.TV, Internet TV channel, currently hosted at sabay.tv, is producing domestic content. Their goal is to bring a cutting edge and topical programming to inform, inspire and entertain the new generation of Cambodia. He also talked about the Cambodian Network Exchange (CNX) which is a not-for-profit, open and neutral Internet Exchange that serves to enhance the Internet environment for local and international IP traffic in Cambodia. Today CNX and Data Center contribute with massive cost savings for content distribution to SDC.

Regulation and Disinformation



VARIOUS perspectives on regulation as a mechanism to effectively counter the spread of disinformation/fake news were presented during the plenary session on “Disinformation and New Media” at the 16th Asia Media Summit in Siem Reap, Cambodia. The session, in collaboration with UNESCO, was moderated by Dr. Ming Kuok Lim, Advisor for Communication and Information, UNESCO, Jakarta.



Dr Masato Kajimoto (PhD), Assistant Professor, Journalism and Media Studies Centre, University of Hongkong, said dealing with disinformation need not necessarily involve regulation because this may impinge on people’s right to freedom of expression.

However, he said, there are exceptions that can be considered such as child pornography or if the disinformation aims to instigate violence.

“Any regulation also requires a clear definition of fake news’, Mr Masato said.

In his presentation, he asked participants whether trust in media can help combat disinformation. He said journalists might say they are to be trusted because they are committed to accuracy and fairness, or that they are accountable for their content, ethically conscious with a reliable track record. “But trust is complicated because it involves both dependence and risks”, he said.

He also said that trust wouldn’t help much because the audience is far less dependent on traditional media.

“The audience needs high level of news literacy to discern accuracy. Your “fair” news coverage could look “biased” in the eyes of the news audience, especially when their trust is placed elsewhere already”, he said.



In the Philippines, Mr John Nery, Associate Editor and Philippine Daily Inquirer columnist, said there is greater resistance to ‘fake news’ legislation. He talked about an invisible machine of networked disinformation working in the Philippines.

Behind this machine are “public relations and advertising strategists who liaise with political clients and set campaign objectives”, he pointed out.

He said there are also the digital influences who are anonymous operators of social media pages, and community level fake account operators who amplify reach and create illusions of engagement.

“They are devaluing information, using untruths to push strategic objectives. This is the new normal”, he said.

In his presentation he said there are seeds of resilience against the spread of disinformation in the country brought about by, among others, more scholarly attention on disinformation and the ‘psychology of misinformation’, greater multi-sectoral cooperation among academia, media, etc., more ‘immediately empowering’ workshops, and more global and regional cooperation.



In Cambodia, Ms Chhorn Navy, Deputy Director of Broadcasting Department, Ministry of Information said inter-ministerial proclamation, media laws, criminal code and audience feedback are some of the mechanisms they use to deal with disinformation.

Under this proclamation, “authorities take action on the blocking of websites and/or social networking sites that launch illegal commercial activities and/or deliberate dissemination of information to trigger social unrest, disrupting national defense, national security, national relations, public order and public order, discrimination and traditional culture”, she said.

She also said that a Ministry of Information App has been set up to enable citizens to provide feedback and platform for government to respond to their concerns on disinformation, among others.



Regulation of internet platforms has been a controversial issue in Europe, according to Mr Roland Husson, Counsellor for Cooperation and Cultural Affairs, French Embassy in Malaysia.

In his presentation, he identified some measures that might be done in

regulating internet platforms. These include significantly improving the scrutiny of advertisement placements, ensuring transparency about sponsored content, intensifying efforts to close fake accounts, facilitating users' assessment of content through indicators, establishing clear marking systems for bots (not confused with human interactions).

"Online accountability is key: Identification and traceability of the source of disinformation", he said.

Ms Anne Kruger, First Draft News Bureau Chief, Sydney, Australia, spoke about efforts to track anti-muslim tactics online during the recent Australian elections. She cited a Facebook page 'Fair Suck of the Sav, Mate' that claimed Muslim Australians used burqas to hide their identities to vote multiple times.

To better understand information disorder, she identified seven types of disinformation and misinformation,



namely, satire or parody, misleading content, imposter content, fabricated content, false connection, false context, and manipulated content.

She urged media to pursue the process of verification to arrive at accuracy and fairness in news reporting.

Media Literacy - A Way Forward to Combat Disinformation

MEDIA literacy that enables media stakeholders and audiences to be critical in accessing, analysing, evaluating and creating media in a variety of forms is a way forward to combat the spread of disinformation, particularly in new media, according to some speakers at the 16th Asia Media Summit.

"Media literacy initiatives should prioritise public school teachers rather than students", said Mr Masato Kajimoto, Assistant Professor, Journalism and Media Studies Centre, University of Hongkong, during the Summit's plenary session on "Disinformation and New Media" on 12 June 2019 in Cambodia.

Ms Anne Kruger, First Draft News Bureau Chief, Sydney, Australia, shared a similar sentiment, saying media literacy programmes should be set up in schools.

"Media literacy has become urgent as 'societies are more divided than ever -- along cultural, socio-economic, geographic, ethnic and religious lines',



and agents of disinformation are taking advantage of this environment", she said.

Another speaker, Mr John Nery, Associate Editor and Opinion Columnist of the Philippines' Daily Inquirer, recommended instead that any media

literacy effort should start with a programme on critical thinking so that people understand how their minds and disinformation work.

Media literacy has been a core programme of AIBD in partnership with UNESCO and other organisations.



Role of Partnerships in Media Monetisation Process

GOOGLE pursues partnerships and collaboration across products and platforms in the monetisation process for both traditional and new media,

according to Ms Parvati Menon, Head of Partner Sales APAC, Google Singapore.

Speaking to participants at the 16th Asia Media Summit in

Cambodia, Ms Menon said Google finds opportunities with new media entities as well as with traditional media, which boast of a legacy to support them.

“If you look at Google, we have partners that span across various services. It’s not that we choose parties often aligned with this, who want to engage us. In customising or helping achieve specific goals, there is constant dialogue. Is it about a business that will grow in the few years and is a partnership the best approach?” she questioned.

Understanding how to monetise is a big challenge particularly in the changing media landscape, she said, adding that in advertising, ‘it is about buying audiences rather than content’, advertisers may be looking for extended reach.

“We have seen consortiums where traditional and new media organisations go together to support





Mr Christophe Hochart



Ms Poonam Sharma



Ms Wei Xing



Mr Leang Delux



Mr Seelan Paul

programmes. It is not who has the price journalistic content, but how this material can reach to an extended audience. We want traditional broadcasters to understand this and there are solutions”, she said

Another speaker, Mr Seelan Paul, Chief Executive Officer, RIPPLE, Media Prima Malaysia, said their media business strategy is to ensure they are in platforms where their audiences are developing content that they can monetise.

Media Prima is Malaysia’s leading full-integrated media company with a complete repertoire of media-related businesses in television, print, radio,

out-of-home advertising, content and digital media.

In radio, he said “people don’t just listen to us; they also watch us in the studio. We develop not just audio but also visual content. We are no longer an audio platform, but a hybrid platform for us to be able to monetise”.

He added that to monetise they use the YouTube platform and branded content for clients who want to tap niche audiences.

Mr Leang Delux, Chief Executive Officer, Thmey Thmey Online webpage in Cambodia, spoke about the objectives of their operations, saying

they have programmes that inspire, educate, innovate and chase what’s trending as well.

“We inspire with our content that focuses on model farmers, outstanding students and innovative people. We educate using deep interviews and meeting with experts, and we innovate by using cartoon, poems, and short videos, among others”, he said.

In generating revenues, Mr Delux said the company produces public relations pieces, banners and video spots. It also offers consultancy services and project and events management, and trainings.

The Deputy General Manager of CCTV.com, China, Ms Wei Xing, spoke about the concept of omnimedia era and media integration, which was the subject of an important speech by Chinese President Xi Jinping in early 2019.

She said that China is constructing the omnimedia communication pattern characterised by the integration of different types of media at the national level.

“The concept of omnimedia will assist the traditional and new media in breaking out of a zero-sum game framework, discover incremental markets, build up new markets and establish new profit models based on media integration”, she pointed out.

In the omnimedia era, she stressed that “the profit models of traditional and new media are not simply in complementary or competitive relationships, but rather as an integration of mutual growth, not as an arithmetical question of addition or subtraction, but rather a “chemical reaction”.



The speakers presented these perspectives at the 5th plenary session titled ‘Monetisation in traditional media/new media: competing or complementing’ at the Asia Media Summit held on 13 June 2019 in Siem Reap, Cambodia.

Technologies for Distribution of Media Contents

By **UTPAL KANTI MANDAL**
Programme Manager, AIBD

DURING the session on 'Technologies for Distribution of Media Contents' distinguished speakers from various organisations from Cambodia and abroad put forward their ideas, views and opinions on the subject.



Mr Som Ratana, Vice-Rector of the Royal University of Phnom Penh, and an Advisor to the President of the National Assembly of the Kingdom of Cambodia moderated the session and facilitated the discussion.



The first speaker Dr Amal PUNCHIHewa, lecturer of IEEE Broadcast Technology Society Technologies and from ADP Consultancies New Zealand, talked about transformation and realities in distribution and delivery of media contents. He provided an

overview to technologies that are relevant to distribution and delivery of media contents.

He emphasized the difference between delivery and distribution in today's context. Satellite was initially used to distribute television signals to transmitter stations. Then direct to home satellite signal (DTH) gave audiences an alternative way to receive television signals. In recent times there are many advances in television signals with more pixels (SD-HD-UHD), better pixels with high dynamic range (HDR) and wide colour gamut (WCG).

Broadcasters and industry have standardised how to capture signals and deliver them to the viewers. The consumer industry has been responding by supplying television receivers capable of UHD-1, HDR and WCG.



Dr. Syed Ismail Shah, Head, ITU Area Office Jakarta, talked about Artificial Intelligence Systems for Programme Production and Exchange. Globally, broadcasters are grappling with the rapidly evolving standards available to deliver consumers increased quality and choice. Transition to these new technologies is complex and costly, and requires careful planning.

However, there are opportunities offered by new technologies like

Artificial Intelligence (AI) which is driving new broadcasting technologies. Use of AI increases productivity, efficiency and creative opportunities during programme production.

In areas of technological benefits using AI/ML, Dr Ismail explained workflow optimization, bandwidth /quality optimization, automated content creation, optimization of asset selection-metadata creation, dynamic product placement and advertising for broadcast and content personalisation.



Mr Shin Seung-han, Director of the Regional Media Policy Division of the Korea Communications Commission, started his presentation by talking about the difficulty facing the traditional media industry due to the convergence between broadcasting and communication, and the terrestrial UHD broadcasting and commercialisation of 5G.

Due to the accelerated convergence of broadcasting and communication, and changes in media usage, YouTube and Netflix are growing fast in Korea. As a result, the competitiveness of traditional media companies is deteriorating. He mentioned that there are more than 24 million YouTube users in Korea, and the duration of viewing time was 25.1 billion minutes. YouTube has a higher share than other OTT services. Also, the number of

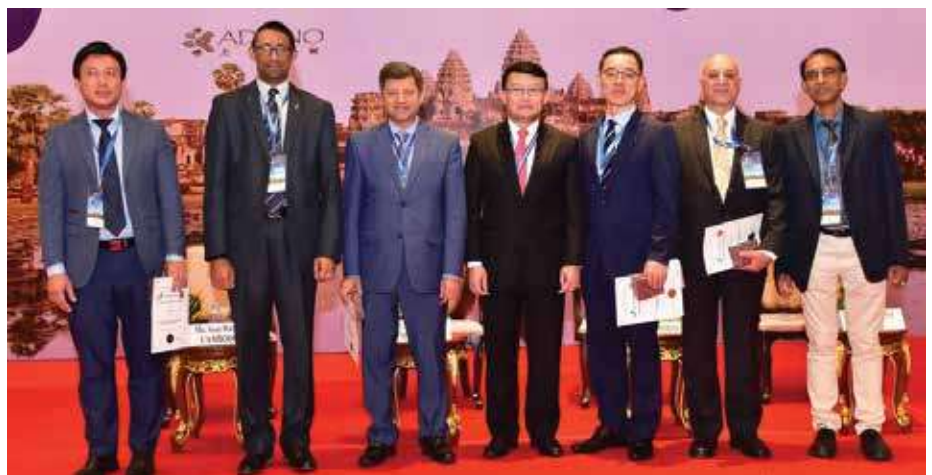
AMS 2019 Plenary Session 6

Netflix subscribers increased 11 times in the past 2 years.

Mr Shin provided the details on the development process of terrestrial TV in Korea citing that in May 2017, terrestrial UHD broadcasting started in the Seoul capital city area for the first time in the world, and its service expanded to metropolitan cities and Gangneung and Pyeongchang. He said they are planning to complete nationwide terrestrial UHD broadcasting network by 2021.

He also said that Korea adopted ATSC 3.0 as the technical standard for terrestrial UHD broadcasting. ATSC 3.0 supports three times higher megabits per second than ATSC 1.0, which was initially applied to digital TV. It can provide immersive broadcasting based on improved image quality, and customised additional services through interworking with IP-based communication service.

Mr Shin also talked about the future prospects for terrestrial broadcasting that UHD will bring. The sense of immersion will be an important factor that will determine the competitiveness of content. The image quality will be 8k or better, and convergence with VR, AR and hologram will be possible.



Mr Sharad Sadhu, Technical Consultant, on behalf of DRM Consortium, presented the topic "Excitement of Digital Radio in FM Band". The digital radio system in the FM band, DRM FM, offers an exciting opportunity for FM radio broadcasters. It has been positively demonstrated that the DRM FM digital

radio slots can be inserted in the guard-bands between two analogue FM radio carriers without disturbing or impacting operation of the ongoing analogue FM radio services.

Each of the 96 kHz wide DRM FM frequency slots can provide up to three quality stereo radio services plus multimedia components as against one service from each analogue FM slots.

It has been clearly established that even in the existing congested frequency spectrum in the FM band, DRM FM digital radio services can well be added and operated. He explained that prospective broadcasters must understand the potential and flexibility of the system in order to allow them to optimise and configure their DRM networks in accordance with their particular market conditions.

Multiple radio services provided by DRM FM can be employed to reduce the congestion in the FM band existing in major cities and offer new revenue opportunities for existing FM broadcasters. DRM FM digital radio channels can be utilised to meet other requirements of existing FM operators; reduced or no interference, good quality signal, reduced pressure of FM analogue on FM spectrum.

He said that the current FM radio operators may be able to use their analogue FM service transmitting equipment for the new DRM FM service. DRM FM is, therefore, a flexible solution that permits broadcasters to provide listeners with significant improvements in service reliability, audio quality and, most importantly, usability.



Mr Sanjay Salil



Mr Tomonori Kawai



Mr Bruno Burtre



Mr Haibo Huang



Mr Chhay Sophal

Creating Archiving Innovations

DIGITISATION of archives & new content can significantly drive nonstop content creation and monetisation around the world, said a leading media entrepreneur from India.

Mr Sanjay Salil, Managing Director of MediaGuru, India, said over 200 million hours of archives are lying on analog format, that is deteriorating and inaccessible, and on the verge of extinction. He also said over 200 thousand hours of digital content is produced by broadcasters every day.

In his presentation at the 16th Asia Media Summit's plenary session on "Preserving our Time through Archives", Mr Salil talked about how MediaGuru is helping organisations digitise and monetise their content.

MediaGuru has worked with the government agency in Qatar to digitise and manage over 150,000 items. It has also assisted India's Times Group, to digitally curate, restore, preserve and manage its valuable media archives.

Times Group is one of the biggest media conglomerates in India, with stakes in publishing, broadcasting, Internet, radio, digital media and entertainment. "It is repurposing and repackaging the same digitised content

for multiple platform and earning out of it", he said.

He also said that "digitisation enables accessibility and management of content that further aids re-distribution through various platforms like OTT, VOD, IPTV, Mobile TV making a new source of revenue for content owners".

Mr Tomonori Kawai, Digital Video Archivist, Archives Division Rights & Archives Management Centre, Japan Broadcasting Corporation (NHK), Japan, also spoke at this session, focusing on NHK's initiatives on archiving.

He said that NHK has a long track record of video restoration and is currently working on the 4K HDR level. It has also built cooperative ties with archives overseas and produced a number of programs incorporating historical footage.

"Our NHK Science & Technology Research Laboratories has developed an AI-assisted automatic colorisation technology that has overwhelming advantage in reducing cost and time", he pointed out.

He also said the network "hopes to make an international contribution by restoring and colorising precious

historical video kept by various nations".

Another speaker was Mr Bruno Burtre, Director, Business Development NOA GmbH, Austria. In his presentation, he said that for the last 30 years' production formats have ruled the archive formats, simply because the archive has been considered as a physical drop off location of content.

"Nowadays with obsolescence coming around, which does reveal the problems of replayers on the one hand for existing legacy archives, and file formats nowadays having it's analogy in being purely production driven, one needs to look forward into an eternity plus one-day vision, when choosing an appropriate archive format", he said.

He advised media companies to choose the right formats & codes for archiving, select the right media for storage – online, nearline and deep archives, weigh benefits of standalone vs media asset management systems and develop workflows.

Another speaker was Mr Haibo Huang, who is a senior media professional and TV producer. He is now serving as the Deputy Head of Phoenix Chinese Channel/Director of the Chief Editor's Office/Head of Phoenix Movie Channel, Phoenix Satellite Television, China.

He said through 23 years of continuing growth, Phoenix Satellite TV has successfully developed a new UMP system to archive their programmes and precious video footages, and uses these ACTIVE Archives to produce archive based News, Feature programmes and documentaries. Presently, Phoenix TV is cooperating with Alibaba DAMAO Academy to develop their Media lab using AI.



Uphold the Centrality of Truth in News Operations

THE head of India's largest public service broadcasting company urged media to put priority to the centrality of truth in news coverage and operations amid advances in technologies.

Some of these new technologies like artificial intelligence have made it almost impossible for audiences to determine real from fake text, videos and photos, Mr Shashi Shekhar Vempati, CEO of Prasar Bharati, India, said.

"Let us draw inspiration from Mahatma Gandhi in his belief and practices that put premium on the importance and significance of truth. He called his action as holding to the truth", Mr Vempati told participants during the CEO Roundtable on "Digitization, Media Credibility" of the 16th Asia Media Summit held on 13 June 2019 in Cambodia.

In a taped video presentation, he called for a "Geneva like convention of sorts where the global community of nations come together and take a stand on the preserving the sanctity of truth in media content across borders".

He encouraged leaders of media to find ways and means to reinforce the centrality of truth amid the digital revolution.

Among his suggestions was to apply the principle that there can be a single version of a truth. "This can be achieved through collaborative effort of media leaders in exploring, for instance, the use of blockchain technology in the creation and dissemination of news so that we present a single operation of truth".

He urged them to use the principle that truth should only be the only measure or yardstick of authenticity or credibility of media.

Another approach, he said, is to uphold the principle that truth is immutable. "This can be achieved through technology-based effort or mechanism to allow for real time verification of original sources of content so that we can access immutable copy of image, video, textual news item".



In the era of fake news, he said broadcasters need to confront several challenges, among them, the new breed of fact checkers who face credibility issues. "We have to raise the issue as to who fact checks the fact checkers".

Another challenge is the spread of fake news where the "manipulation of public opinion in foreign states is being done by using technology as an instrument of state policy".



FAKE NEWS AN ADVERSARY IN MANY UNCONVENTIONAL WAYS

Another speaker was Mr Rizal Giovanni Aportadera Jr., Director General, Philippine Broadcasting Service, Bureau of Broadcast Services, Philippines.

In his presentation, he said fake news is a new form of plague in the cyber world that affects almost everyone online.

"In the Philippines, and under the Duterte administration, it became clear to all of us in the communications sectors, that fake news is an adversary that will continue to fight us in many unconventional ways", he said.

He also said the Philippine Broadcasting Service which runs 35 radio stations across the country and supported by 30 affiliates in areas not reached, has pursued programmes to counter disinformation.

One of these is called 'The Cabinet Report', anchored by Communications Secretary Martin Andanar. It invites members of the Cabinet and other government officials to discuss facts and data as well as insights on issues of national concerns.

Combatting Disinformation, Enhancing Media Credibility

TOP executives of public broadcast networks in Asia Pacific gathered for a roundtable to examine the spread of fake news amid advances in technology which they said was worrying and needed stronger ethics and regional collaboration to fight it.

They shared their insights during the Asia' Media Summit's plenary session entitled "CEO Roundtable: Digitisation, Media Credibility" which was held on 13 June 2019.

Chaired by Mr Fayyaz Shehryar, AIBD President and Director General of All India Radio, India, the CEOs also discussed ways to improve media credibility, which some said was waning.



MEDIA CREDIBILITY NEEDS FIRM AUTHORITY AND BRANDING

Dr Abbas Naseri Taheri, Director General of International Relations, Islamic Republic of Iran Broadcasting (IRIB), Iran, stressed the need to enhance trust and credibility of mainstream media as they deal with the impact of digitisation and the spread of disinformation.

"They must also keep their authority and branding as well to become more credible", he said.

In his presentation during the CEO Roundtable on "Digitisation and

Media Credibility", Dr Taheri proposed strategies to overcome credibility problem.

These include effective presence in new platforms, preserving media brand image to remain source of credibility and prestige for digital content, and increasing users' digital literacy.

He shared IRIB's experience in dealing with credibility problem, saying the organisation has set up a local Internet TV channel (People News), an audio-visual regulatory authority department, and a digital literacy centre to be placed in government agencies to help counter negative effects of the digital world.

EDUCATION IS BEST WEAPON VS FAKE NEWS, CYBERCRIMES

Mr Abdul Muis Shefii, Director General of Radio Television Malaysia (RTM), Malaysia, said education and public awareness serve as effective weapons to fight fake news and cyber-crimes on the internet and social media.

He said that in Malaysia close to 3,000 cybercrime incidents were reported from January to April this year.

Based on a local survey, he pointed out that 73% of Internet users in Malaysia were concerned



about the negative impact of fake news, yet 63% of Malaysians could not distinguish between rumours and good journalism.

He cited an internet safety campaign called "Click Wisely", and #myviralvow campaign to educate netizens to be more aware of the use of the Internet.

On enforcement, Mr Shefil said the government has set up agencies to monitor and investigate any activities involving Internet misuse.

Both radio and television in Malaysia are seen as trusted news platforms because they provide balanced news, according to a local survey he presented.



BATTLE LOST IN COMBATING FAKE NEWS!

In the age of digitisation, Mr Ryaz Sayed-Khaiyum, CEO of Fiji Broadcasting Corporation, Fiji, said that maintaining credibility for media organisation is difficult with millions of information sources.

"We try to break story first but in our haste we fail to fact check. Today, the battle has been lost in combating fake news", he said.

To ensure credibility, Mr Ryaz offered suggestions on how to ensure media credibility. These include



following set journalistic ethics; verifying statement; ensuring that the source is a trusted one; showing proof be they recording or documents; avoiding speculative reports and gathering facts; and never trusting social media pages as a direct source.

“We seem to be entering an age where nothing is considered truth and this could have dire consequences for society overall”, he warned.

ENSURE SOURCE RELIABILITY

Mr Saranga Wijeyarathne, Director General, Sri Lanka Rupavahini, said studies show that media credibility is falling amid the spread of fake news.

He said that for content creators, there is a need to ensure reliability of the source, gather evidence, cross check information, and validate everything with the editor-in-chief.

These guidelines, he said, form part of a process to maintain credibility.



MEET AUDIENCE INTERESTS

Mr In Chhay, Undersecretary of State for the Ministry of Information, identified three key strategies to address the demands of the digital world and media credibility.



“Let’s invest in new digital technologies. Also we must meet the interest of customers/audience and build stronger identity, which requires investing in technical and editorial improvements, and engaging in more training, networking and partnership”, he said.

Cambodia Information Minister Calls the 16th Asia Media Summit a Success



DR Khieu Kanharith, Cambodia's minister of information, described the 16th Asia Media Summit a success, saying it gave participants opportunities to evaluate how best to take advantage of digitisation and other new technologies that can serve society better.

Speaking at the closing of the Summit on 13 June 2019, Minister Khieu Kanharith said the conference was "a great achievement in sharing knowledge about the potential advantages in doing the media digitisation, problems solving on concerned matters, as well as to

promote a closely cooperation in the region, in order to harness for together growth of the digital media development".

He cited the insights on media digitisation presented by Cambodian Prime Minister Hun Sen during the inaugural ceremony of the Summit.

He said the Cambodian leader identified some of the advantages of digitisation, among them, enhanced broad quality, speed of data transmission, data archiving, efficient use of radio frequency, reduced production cost.

According to Dr Khieu, Prime Minister Hun Sen also said that media digitization has made developing countries to become digital government, allowing their governance, services serving and services receiving, and business affairs, to offer more quality, effectiveness, and efficiency. It also connected people to people internally and globally.

The Prime Minister also talked about the disadvantages of digitisation. It requires a huge budget spending in order to build infrastructure both on the ground and beneath the ground, in the air and at the sea bottom.

It also demands high capable personnel to handle advanced technologies. It has dragged down the popularity of the traditional media affecting their markets and jobs. Moreover, digitisation has enabled the spread of fake news, cybercrimes, extortion, hacking to destroy data, private-rights abuses

These disadvantages have brought about turbulence to society's security and unimaginable damages, the Prime Minister said.

In closing the annual gathering, the Information Minister thanked participants, speakers and sponsors who contributed to the summit to be more proactive on media cooperation and made the media industry more



aware of evolving new technologies and its effects as well as of the need to better adapt to advanced technologies for a better world.

BROADCASTERS FACE ENORMOUS PROBLEMS TO ADAPT TO NEW TECHNOLOGIES

For her part, AIBD Officiating Director Philomena Gnanapragasm said broadcasters face enormous and complex problems as they confront the impact of the Fourth Industrial revolution, but expressed hope about what the future holds as they adapt to new technologies.

In her remarks, she highlighted various issues the Summit examined including new trends in new technologies and how broadcasters can maximize their use to improve programming, expand audience reach

and meet other organisational goals. She also cited discussions on trust and credibility of media amid the digital revolution, and the spread of disinformation or fake news, its impact on governments, media, private sector and society.

"We heard several approaches to combat disinformation or fake news, from strengthening regulations and ethical standards, thorough verification process of information, to media literacy initiatives", she said.

She also thanked all AIBD members and partners to participants and speakers - more than 600 local and foreign delegates- for keeping AMS strong and relevant.

"Our special gratitude too to the government of Cambodia, the Ministry of Information for their generosity and hospitality in hosting the pre-summit workshops, the AMS and cultural visits", she said.

Q&A with the Winner of Category Science/Environment for The Best TV Programme on “Taming the Sea of Plastic”

Programme title: ‘**Plastic Earth**’

Producer: **Chul-hoon SONG**, KBS 1, Korea



Broadcaster: How did the project come about?

Chul-hoon SONG: It dates back to 2009 when I had picked up a small newspaper article that some students from Busan Foreign Language University would go Beach Clean-Up

volunteer to Tsushima island in Japan.

I happened to have a chance to join the team and carried with my small camera to make a story of the good deed of Korean students. Astoundingly what I had found at the coastline was the unaccountable

amount of marine debris mostly comes from the Korean peninsula pushed by strong northwest wind during winter.

It has driven me to delve in marine debris and visited many places ever since and realized it is not a matter of just one restricted country problem but rather it's an issue of co-related global environmental pollution. Meeting with Capt. Moore from the Algalita Marine Research Foundation was a good opportunity to broaden my scope to microplastics in the ocean.

He is the first one who let the world know the existence of a garbage patch in the North Pacific Ocean where we now currently used to call the garbage island, the triple size of Texas. Once the plastics are introduced into the ocean, they start to break into small pieces by ultraviolet and waves as time goes.

The Kamilo beach on Hawaii island is covered with small sandlike plastic particles mostly come from the garbage patch. Once the plastic changes its shape into the micro-level, it would be impossible to recover.

Broadcaster: What were the challenges that you faced and overcame?

Chul-hoon SONG: The main huddle for this documentary was widespread locations throughout the world. It is not restricted to one region or country. Normally when I make a documentary there is a limited budget. Due to tight finance, I couldn't go to many places at a time. That's why I tried to focus on marine debris topic as far as I can and finished filming one by one where I desired to visit. 'Plastic Earth' is a compilation of the past 10 years' locations in and around the Pacific.

Broadcaster: What was the take away from the documentary?

Chul-hoon SONG: We cannot imagine living without plastic today



and are consuming an unbelievable amount of plastics every day. Plastic has brought undoubtedly convenience to human life. From complex gismo to plastic bags it would be more easy to point things without plastic these days.

The exponential increase in consuming plastics during the last two or three decades has brought deadly consequences to earth life. Eating plastics became normal to marine animals and the total sum of bio and plastics in the ocean would be equal in 2050.

Even there was a report that we humans are eating microplastics the amount of a credit card every week. We do not know how those microplastics would affect our bodies

yet. It would take time to publish this clinical test. I do not know how long will it take. 20 years or more.

Thank You Speech:

First of all, I want to thank John and other jurors who had chosen this work as a winner. There was a recent news report that we are eating unknowingly microplastics the amount of a credit card every week. Here I can see hundreds of plastic bottles in this conference hall. We are living in a world not thinking about plastics in our daily lives.

I delved into this topic ten years ago and when this documentary aired last year in Korea it drew a big interest throughout Korea. Even

the Korean government had banned serving disposable plastic cups and free plastic bags to the customers who drink in the coffee shop and supermarket. If the policy deployed before this documentary, citizens would not understand and follow the harsh government rule.

I, as a documentarist, am feeling pride in what I had done for Korea and even earth. In 2050, the total sum of plastics would be the same as living organisms in the ocean. There is no solution for removing plastics already induced to the ocean. The only way to solve this problem is to stop or decreasing using plastics. The time we think late is the time at the earliest. Thank you.

Q&A with the Winner of Category Humanity for The Best TV Documentary on “Technology and Humanity – The Impact”

Programme title: **‘Becoming Human: Coding Morality’**

Producer: **Jen Tsai**, Mediacorp Pte Ltd, Channel NewsAsia - Singapore



Broadcaster: How did the project come about?

Artificial Intelligence has been in the spot light in recent years. Beyond the more obvious forms of technology like robots and autonomous vehicles, many of us do not realize that it is much more prevalent - it is part of the smartphones that we use daily, it is used in public transport dispatch system, in healthcare for disease

diagnosis and even in matchmaking software.

So in 2018, Channel NewsAsia decided to launch a series of documentaries about Artificial Intelligence, “Becoming Human” to examine how this new technology affects us in the various fronts, and what we need to be aware of and how we could adopt this technology to our advantage.

Broadcaster: What were the challenges that you faced and overcame?

Jen Tsai: It’s a topic that is hard to understand and it is even harder to explain it to TV audience! We have to translate technical information into relatable stories that our audience can understand and resonate with.

So we decided to engage a host who’s known for his quick wit and sense of humour, Mr. Chua Enlai. We have Enlai present hard-to-understand information through funny skits, and incorporate graphical animations to explain the technical details.

We also tried hard to find profiles with interesting stories to tell, and through these stories, we illustrate how AI is adopted in various technologies that touch us daily, and what we need to look out for as AI becomes more and more prevalent.

Broadcaster: What was the take away from the documentary?

Jen Tsai: Artificial Intelligence will play a big part in improving our lives, but we need to start thinking about how we could adopt this technology in an ethical and responsible manner.

Thank You Speech:

It’s an honour to receive this award from AIBD recognizing the hard work we put into this documentary, “Becoming Human - Coding Morality”. When I was first tasked with this programme, I was excited and nervous. Excited, as I would soon get to learn more about AI and experiment with new visual effects treatment for this project. Nervous, as I had no idea how to present such cerebral ideas on ethics and morality visually, and make them TV-friendly!

It took months of research, first to understand what AI is all about ourselves, then to find relevant profiles and stories.

World Television Award 2019



Our goal has always been to highlight these important ethical and moral issues relating to the development of AI in a way that our

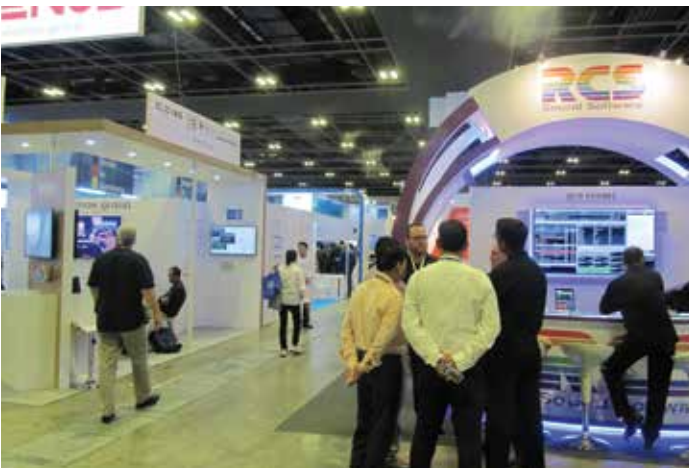
audience could relate to. It is never easy to explain technology, and somehow, I think we have found a way to humanise the technology and

present the information through a fun and engaging way.

It's truly a team effort, and I'm honoured to share the credit with my researcher, Junaini Johari; fellow producers on this series, Chong Yew Meng, N. Shanmuga Sundaram, and Shahul Hameed, our dedicated production management team, Nivitra Devi, Lock Wei Ping and Asha Nurul; and our technical crew who had to find interesting angles to film very many inanimate objects.

Our host, Enlai had been a trooper throughout the project, surviving long hours of shoots across continents with us.

And last but not least, I want to thank our executive producers, Tan Lek Hwa and Mark Pestana for trusting me with this project and giving me this opportunity to work on this challenging yet extremely fulfilling project.



ConnecTechAsia 2019: Experiencing the Future in Asia's MEGA Technology Event

By **UTPAL KANTI MANDAL**
Programme Manager, AIBD

BRINGING together BroadcastAsia, CommunicAsia and NXTAsia across two venues in Singapore, ConnecTechAsia showed state-of-the-art communication, enterprise, broadcast technologies and innovations. Coupled with a supercharged agenda that featured renowned speakers and a host of experiential activities, the event paved the way for discovering Asia's future in technology. It was held from 18-20 June 2019.

BroadcastAsia remained the must-attend international event for pro-audio, film, digital media and broadcasting industries, with

new highlights to showcase the latest disruptions in broadcasting technologies, digital solutions and innovations that drive the digital multimedia ecosystem.

Into its 30-year edition, CommunicAsia continued to be Asia's key international information and communication technology trade event. The event consistently had been delivering a highly relevant show experience for ISPs, satellite operators, system integrators, mobile operators.

NXTAsia, the definitive platform that spurred the digital enterprise

Engineer, attended the AIBD booth and organised the seminars. He met the delegates and exhibitors at the AIBD booth and at the exhibition hall. The Institute's quarterly magazine Broadcaster, research journal AAMR, proceedings of AMS- 2018 and other AIBD publications were made available to the visitors at the booth.

Although the focus of exhibitors was more on display of technical equipment at the exhibition hall, AIBD received very good response from delegates and other interested parties who paid a visit to the AIBD booth in good number. The walking



transformation for businesses, had spotlights on a comprehensive array of disruptive technologies and emerging solutions from around the world.

ConnectTechAsia opened with exhibitors highlighting solutions based from emerging technologies such as 5G, Artificial Intelligence (AI), Internet of Things (IOT) Smart Cities and Blockchain. The platform brought together industry leaders, solution providers, entrepreneurs and policy makers to focus on the key issues of the present day.

More than 50,000 visitors, speakers and exhibitors from more than 100 countries attended the technology summit. It was a place to experience the future through a plethora of experiential programmes, including the high-level summit, technological showcases and complimentary value-added activities on the show floor.

To keep pace with the technological advancements and innovations and for enhancing the popularity of AIBD activities, the Institute participated in ConnectTechAsia like previous years and set up a booth at Broadcast Asia 2019 located at Suntec Singapore. The AIBD booth displayed posters and buntings to attract visitors. In addition, AIBD in collaboration with ABU and

Broadcast Asia conducted two half-day seminars on 18 June 2019 at Suntec City. Mr. Utpal Kanti Mandal, Programme Manager-Broadcast



visitors at the AIBD booth collected information on the institute. Mr Utpal invariably explained to the visitors the AIBD functions and training activities.

Delegates from AIBD member organisations acknowledged the strength of AIBD on executing quality workshops, conference and effective trainings. He also met the potential conference speakers and top executives of media organisations in conference and exhibition halls.

Prominent of them were Mr Desmond S.D., Sales Director of Measat, Mr Ronan Cante, Solution Engineer, Eutelsat, Mr Stefan Pfitze, Managing Director- X-dream –Media GmbH, Germany, Dr Pakdee Manaves, Deputy Secretary General of NBTC Thailand, and Ms Kathryn Brown of Commercial Radio Australia.

During the seminar sessions and exhibition, Mr. Utpal also met the organisers of the ConnectTechAsia and discussed about future projects. The organisers Informa/UBM expressed great satisfaction and thanked AIBD specially for partnering on seminars on Digital Radio in addition of support in setting up AIBD booth at the exhibition hall.

Mr Utpal reciprocated and on behalf of AIBD conveyed the sincere thanks to UBM team for extending warm welcome to AIBD in the exhibition and for providing all out support for organising the seminars. In total the participation of AIBD in ConnectTechAsia and as exhibitor in Broadcast Asia – 2019 and conducting seminar remained effective and successful.

Winners will be announced during the GC in Bhutan

By **NABEEL TIRMAZI**
Programme Manager, AIBD

AIBD will announce the winners of the AIBD TV and Radio Awards 2019 at the 45th Annual Gathering/18th AIBD General Conference & Associated Meetings to be held from 22 to 24 August 2019 in Paro, Bhutan. The judging session was done on 19 July 2019 at the AIBD office in Kuala Lumpur.



The judges' board included Mr Jack Nadarajah, renowned Malaysian Broadcaster; Dr Ramachandran Ponnar, Taylor's University, Malaysia; Ms Salbiah Mohd Sharif, Assistant Director, Department of Broadcasting Malaysia and Mr Zairul Eizam Abdul Rahman, renowned Malaysian documentary maker.



Based on the entries received for this award, the panel assessed the entries for the different award categories based on concept and production values.

DAB+ Digital Radio Broadcasting: Technology and Implementation

By **UTPAL KANTI MANDAL**
Programme Manager, AIBD

DIGITAL technology has steadily transformed the way in which programmes are made in the last 20 years. The switch from analogue to digital is moving along the broadcasting chain into transmission and digital developments are drawing together the broadcasting, telecommunications and computer industries in a process of convergence.

Asia-Pacific Institute for Broadcasting Development (AIBD) in collaboration with Asia-Pacific Broadcasting Union (ABU), Arab States Broadcasting Union (ASBU) and World DAB organised a Regional Workshop on DAB+ Digital Radio Broadcasting at Kuala Lumpur, Malaysia from 08-12 July 2019.

The five-day course covered most of the technical fundamentals and technology used on DAB+ Digital Radio. Sixteen participants from seven AIBD, ABU and ASBU member countries attended the workshop.

There were a number of speakers. Dr. Les Sabel from World DAB, the primary consultant for this workshop provided the background on digital radio and changes that has come into Radio Industry due to digitalisation. He talked about the DAB+ system structure, systems and networks, current transmitter technologies and architecture.

In addition, he delivered on DAB+ policy and regulation, DAB network planning and discussed case study of Australia. He further explained about hybrid radio, the PAD delivery systems and different types of receivers. There were sessions for RF coverage, including spectrum and regulation overview, coverage planning, propagation, RF network design, single & multi-frequency networks and RF interference.

In today's global market, over 75 million DAB, DAB+ and DMB devices have been sold to consumers, and this market continues to grow as the technology becomes more established. The manufacturing of digital radios



has significantly developed over time both visually and functionally.

On the second day Mr Sohan Karunaratne from Aqipa Australia Pte Ltd talked about Aqipa-Pure receivers. He mentioned that, as the pioneers of digital radio and the first to fully embrace the technology in 1999, Pure has become the world's leading digital radio manufacturer, with over 5 million sold worldwide.

Mr Sohan showed and described various models of Pure manufactured DAB receivers in the categories of portable, personal, bedside, in-car models. Michael Chen of Keystone Semiconductors, Taiwan took a session on digital Radio receivers as well, wherein he described about receiver construction, receiver modules and provided overview of the company products on receivers.

Mr Anupon Tajawanno, Regional Sales Manager, Paneda Tech AB, Thailand in his session spoke about DAB+ Field trial and DAB+ roll out in Thailand. He mentioned that the Paneda group is active in the area of Digital Radio (DAB+), with its main focus on applications for safety systems in tunnels and buildings. Paneda has developed a complete "break-in system", where it is possible

to interrupt the ongoing broadcast signal and replace this with an emergency message.

Mr Jason Mak from Gates Air explained what makes DAB+ environmentally friendly, where he discussed about power consumption and efficiency, space and environment, capital and operating cost and comparisons with FM and DRM+. He also talked about low power VHF radio products and components.

Mr Yahya Khaled, ATDI South Pacific Pt Ltd., Australia discussed on RF Planning software tool developed by the company. ATDI develops, supplies and supports a comprehensive set of software tools for the planning, modelling and regulation of radio communications services.

Mr Khaled explained in details on ATDI's network planning and modelling tools considering terrain and associated clutter, supported by the very latest propagation tools. He demonstrated effects of changing various planning parameters taking the DAB+ planning examples.

Dr Les arranged a Hand on Exercise for the participants for planning of Digital radio network. Participants were divided into groups having 5-6 in each group. Discussions held on how to plan, design and implement a digital radio network. Three groups worked over the days in specified slots and presented their respective group's work on the concluding day.

Participants joined a half-day field visit to Radio Television Malaysia (RTM) Radio studio facilities. The Engineer(s) at RTM demonstrated and explained to participants about FM Radio studios at Wisma Radio Complex.

The opening proceedings of the workshop were addressed by Ms. Philomena Gnanapragasam, Officiating Director AIBD; Dr Adnan Salhab, Head of Training, (ASBU); Mr Nadeem Ahmed, Director Technology, ABU. The workshop was closed with presentation of certificates to the participants.



AMS IN PICTURES



