A.B.I.S®
ASIA'S BROADCASTING & INFOTAINMENT SHOW

32nd Edition
BI2023
BROADCAST INDIA SHOW ■ MUMBAI

CONTX2023
CONTENT INDIA SHOW ■ MUMBAI

8 - 10 October, 2023
Jio World Convention Centre, Mumbai

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NÜRNBERG MESSE

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www.broadcastindia-show.com

FILM ▪ TV ▪ RADIO ▪ AUDIO ▪ MOBILE ▪ NEW MEDIA ▪ CONTENT CREATION ▪ MANAGEMENT ▪ DELIVERY

NÜRNBERG MESSE

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DRAMA • FICTION • KIDS / LIVE ACTION • GAMING • DOCS & FACTUAL

UNSCRIPTED / REALITY • PUBLISHING

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Contents

MANOJ MADHAVAN

Editor

The media and technology businesses are feeling the brunt of global economic malaise and the lingering effects of the pandemic. Disney+Hotstar plan to discontinue HBO content on its platform. MX Player will be acquired by Amazon very soon. Ormax said OTT penetration in the metros is 79 percent, underscoring the need for chasing growth in small town India. There are investments happening within the media and entertainment sector in India, but its not at the pace which was being anticipated.

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From the Editor's Desk

The entire industry is right now in a state of tizzy. The media and technology businesses are feeling the brunt of global economic malaise and the lingering effects of the pandemic. But there are plenty more factors to consider in order to gain an understanding of the complex web of forces at play across dozens of sectors, such as streaming, film, TV, advertising, regulation, the metaverse and so much more.

Disney+Hotstar plan to discontinue HBO content on its platform. MX Player will be acquired by Amazon very soon. Netflix is expanding its film library in a big way, especially, in southern languages

The OTT players are relooking at the entire business model and overall there is a consolidation happening in the market. While market research by Omax estimates that the industry is expected to touch $ 11-13 billion by 2030 and the primary driver for growth will be paid subscriptions or SVoD (subscription video-on-demand) segment slated to jump from 85-90 million to 160-165 million by 2027.

Ormax said OTT penetration in the metros is 79 percent, underscoring the need for chasing growth in small town India. The days of crazy 30% growth rate in subscriber additions are over with the pandemic, having settled at a more modest 15 percent with top 8-10 cities reporting a growth rate of 10 percent.

The article focusing on Content Monetisation and Distribution will highlight the current status in the industry globally.

At the upcoming NAB Show, there will be a major thrust on streaming and OTT related products as hordes of start-ups will be vying for attention with their slate of products and services.

There are investments happening within the media and entertainment sector in India, but its not at the pace which was being anticipated. The new surge in metaverse and other emerging technologies has not picked up the kind of pace which was predicted earlier. All of this will fall in place, but at its own pace. The industry has to wade through with cautious optimism in the meantime and things will stabilize in the near future.

Manoj Madhavan - Editor

Broadpeak to Highlight Future-Proof Video Streaming Solutions at the 2023 NAB Show

At the 2023 NAB Show, Broadpeak will showcase world-class software and services for video delivery and streaming. With Broadpeak's software deployed on-premises, offered as a service, or a hybrid of both, video service and content providers can deliver an outstanding quality of experience (QoE) and reduce energy consumption.

"The NAB Show is an excellent opportunity for us to show how Broadpeak is leading the charge for better streaming quality, improved energy efficiency, and increased monetization," said Jacques Le Mancq, CEO at Broadpeak. "Video delivery is evolving, and the need for sustainable solutions is critical. With our CDN technologies, video service providers and broadcasters can adapt to the transformations happening in the video industry."

Key Highlights at 2023 NAB Show Will Include:

❖ NEW Advanced CDN Preparing Operators for the Future of Video Delivery

❖ Enhancing Video QoE and Monetization With Multicast ABR

❖ Packaging Content on the Fly With the BkS350 Origin Packager

❖ Simplifying Video Streaming With broadpeak.io SaaS

❖ Increasing Monetization With Dynamic Targeted Ad insertion

❖ Speeding Up Time to Market for IP Video Streaming Services With peakVU. TV

❖ Optimizing QoE for Video Delivery Over Satellite

Alt Balaji New Brand Name - ALTT

Alt Balaji new brand name – Altt. The company stated that the change in logo is part of its broader rebranding strategy, which aims to align its image with its core values and mission.

Altt has announced the appointment of a new Chief Business Officer Vivek Koka. He comes with over 20 years of experience.

Koka said, "Altt has been a pioneer in the Indian OTT space and has entertained audiences across the country. With success and adulation comes the responsibility of staying true to the consumers' expectations. Keeping in line with the same thought, Altt embarks on an exciting journey with its identity backed by equally engaging content. It is a great time for me to be associated with the brand and to be a part of this journey."

EditShare boosts connectivity and workflows at NAB 2023

EditShare®, the technology leader that enables storytellers to create and manage collaborative media workflows, will use NAB2023 (booth N2100, Las Vegas Convention Center, 16 – 19 April) to unveil its latest productivity and creativity enhancements. The continuing development of EditShare core functionality is targeted at creative freedom and simpler, more resilient and secure workflows.

EditShare's workflow solutions are driven by its market-leading EFS Storage and FLOW media management – these are combined in FLEX for fast cloud

Disney Mulls $5.5 Billion Cost Cutting

Disney is resorting to massive job layoff and will cut its manpower by 7000 jobs.

Bob Iger. Disney CEO informed moving forward the creative teams will determine what content they are making, how it is distributed and monetized and how it gets marketed. Managing costs, maximizing revenue and driving growth from the content being produced will be their responsibility, he said.

Iger noted that the reorganization will include three core business segments - Disney entertainment, ESPN, and Disney Parks experiences and products.

Alan Bergman and Dana Walden will be co-chairman of Disney entertainment, which will include the company's full portfolio of entertainment media and content businesses globally, including streaming.

Jimmy Petoro will continue to serve as Chairman of ESPN, which will include ESPN networks, ESPN Plus and international sports channels.

Josh D'Amaro will continue to be chairman of Disney Parks experiences and products, which will include theme parks, resort destinations and the cruise line, as well as Disney's consumer products, games and publishing businesses.

implementations. By integrating storage on premises, at multiple locations and in the cloud, connectivity is at the heart of the workflow and serves multiple market verticals and applications in broadcast, production, post, education, sports, news, corporate/enterprise, and houses of worship.

Swift Sync gives users a way to share media across different EFS systems in the cloud, on prem or in between. Users can select all or some of their media spaces in any location and bring it into their workspace, whether they are in a facility, working at a remote location or using cloud editing via a desktop emulator. FLOW provides support for multiple streams of multiple codecs. In addition the latest EFS release delivers as much as a 60% increase in throughput for certain codecs/configurations from the previous hardware/software.

Editors use the tools of their choice because FLOW and FLEX integrate with software from Adobe, Avid, BlackMagic and others without having to change screens. Included in this spring release are a number of features and improvements to our FLOW Panel for use with Premiere® specifically. Collaborative teams can easily connect with each other using EditShare's unique Universal Projects technology, providing a seamless means of exchanging projects between post production users and platforms.

EditShare's advanced set of open APIs means it's easy to integrate tools from partner companies and third-party vendors, whether that is capture software from Cinedeck, workflow orchestration from Helmut, cloud hosting from AWS, AI capabilities from Audimus and Mobius, NRCS systems and more, many of which will be demonstrated at the show.

To ensure that mission critical content flows – like channel playout or fast turnaround editing – are never compromised, users can now manage storage access bandwidth to guarantee quality of service for each workstation, user or group with EditShare's new Swift Control. The latest release also moves to streamline and simplify still further the new web user interface in FLOW, and to make FLEX Cloud Edit+ easier to deploy through intuitive user interfaces without the need for cloud specialists.

The latest versions of all of EditShare's proven storage solutions and workflow software can be seen at NAB2023, on booth N2100. For further information on all EditShare solutions, please visit the website at www.editshare.com.

Hitomi Broadcast Unveils New Cloud-Based Lip-Sync Measurement Tool at NAB 2023
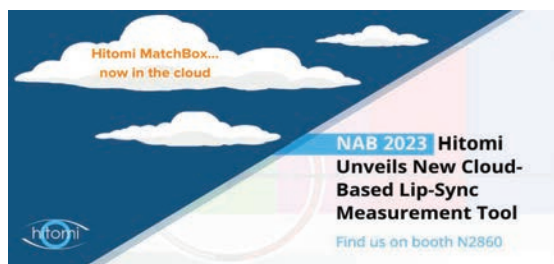
Hitomi Broadcast, market leader in audio/video alignment and latency tools, is showcasing its latency and synchronisation tools at NAB2023 (booth N2860, Las Vegas Convention Center, 16 – 19 April).

With the rapid growth in remote production and IP contribution, these simple and cost-effective tools are more in demand than ever.

New for NAB 2023 is lip-sync measurement in the cloud. Attendees will be able to see a live demonstration of a file-based version of MatchBox.

MX Player Looks For Buyers

MX Player is up for sale as per reports. Amazon, Zee and Sony have shown their interest in acquiring the Times Internet-owned OTT app

Amazon Prime Video, Sony and Zee are reportedly in talks with Times Internet to acquire MX Player.

According to reports, deliberations are currently underway and the terms of the deal are yet to be finalised. While the discussion is in progress, reports suggest that Amazon's offer may not materialise into a deal.

Times Internet acquired MX Player in 2018 for $140 million. MX Player launched as a video player on July 18, 2011. Later in 2019, it pivoted to an OTT streaming platform, catering primarily to the Indian audience.

MX Player was also one of the earliest video apps to expand into the short video format by launching MX Takatak, which eventually merged with ShareChat's short video offering Moj in a deal worth $900 million.

MatchBox is now widely recognised as an industry standard in lip-sync measurements, and the latest MatchBox Glass iPhone app makes it even simpler to very quickly line up each camera feed. With remote productions like major sports sending very large numbers of feeds back to the central control room, managing lip-sync is critical.

The latest addition to MatchBox is the ability to measure end-to-end latency over a broadcast path. Given the need for minimising latency, Hitomi now recommends using MatchBox Latency to establish the delay over each circuit, before using MatchBox to synchronise pictures and sound. The same MatchBox analyser provides highly accurate readings of latency and lip-sync shift, ensuring precision alignment based on data rather than trying to match them by eye.

"NAB is a really important event for us, because you really have to see how simple the MatchBox system is to realise how it can transform outside broadcasts and remote productions," said Russell Johnson, Director at Hitomi. "It also gives us the chance to showcase the latest developments, like our commitment to SMPTE ST2110, and our solutions for MatchBox in cloud architectures."

QYOU Media India Selects SpringServe as Its Primary Ad Server

QYOU Media India's Q PLAY app partners with SpringServe to connect advertisers with viewers across OTT and CTV

SpringServe, the leading independent TV ad serving platform now part of Magnite, has announced that QYOU Media India has selected them as primary ad server. The move comes as QYOU Media India strengthens its focus on providing the highest quality experience for viewers across its premium content library, with an aim to connect more advertisers with viewers.

QYOU Media India's Q PLAY entertainment app has a growing presence on Connected TV with channels including – The Q, Q Marathi, The Q Kahaniyan, The Q Comedistaan and Q GameX. The entertainment network's channels deliver popular digital content from digital creators for young Indian viewers. With the burgeoning growth of Connected TV in India, QYOU Media India is focused on expanding its digital footprint with the addition of valuable service partners like SpringServe.

"As our business grows across screens and formats, it is necessary for us to align with a technology partner who supports our vision as we continue to scale," said Krishna Menon, COO, QYOU Media India. "SpringServe's advanced ad serving features will enhance our inventory management. We look forward to our partnership with SpringServe as we scale to become a holistic entertainment brand in India."

SpringServe's built-for-video CTV ad serving capabilities provide publishers with enhanced insight, transparency, and control. QYOU Media India will leverage proprietary SpringServe features to enable more efficient and accurate management of advertising for more optimal ad experiences.

TV TODAY Posts Turnover of Rs 258 Crore

TV Today Network saw a decline at Rs 231.31 crore for the quarter ended December 31, 2022 compared to Rs 257.97 crore in the same quarter last year.

Company's total income fell 8.4% to Rs 244.31 crore in Q3 FY23 from Rs 266.83 crore in Q3 FY22. Expenses jumped 12% to Rs 206.30 crore from Rs 184.25 crore.

Network's net profit for the quarter declined by 55% to Rs 27.62 crore from Rs 61.50 crore.

Company's television and other media operations revenue for the quarter ended December 31, 2022 was Rs 228.93 crore against Rs 252.16 crore. Furthermore, the revenue from radio segment was Rs 2.38 crore against Rs 5.81 crore.

The board also approved re-appointment of Aroon Purie, Chairman and Whole-time Director with the effect from April 1, 2023 for a period of five years, subject to approval of shareholders of the company. Re-appointment of Kalli Purie Bhandal, Vice-Chairperson and Managing Director was also approved w.e.f. April 1, 2023 for a period of five years, subject to approval of shareholders of the company.

Telestream Introduces PRISM MPP
Purpose-built for Post-Production and Remote Workflows

Telestream®, the global leader in workflow automation, media processing, video quality monitoring, and test and synchronization solutions for the production and distribution of video, is introducing PRISM™ MPP, a new line of multi-format rasterizers purpose-built for post-production.

The three new models, MPP 100, MPP 200 and MPP 300, extend the PRISM family of software-defined monitoring instruments to address post-production users requiring high-end production video formats like 12-bit RGB for 4K/UHD applications in both SDI and IP. These instruments include measurement tools for colorists with HDR requirements, a complete set of QC tools for objective evaluation of high-end video and audio content, and a remotely accessible user interface. Purpose-built for post-production, they're exceedingly quiet, support a wide range of formats, provide new functionality designed to make color gamut assessment and compliance easier than ever, and offer loop-through for reference monitors and analog audio out for edit suite configurations.

The MPP models support local, remote, and post-production applications up to 8K. They enable color grading in SDR and HDR formats including wide-color gamut, surround sound audio production up to 7.1.4, high-end post-production video formats including 4:4:4 and 12-bit RGB for 4k/UHD applications, dual display support, and all the operational SDI monitoring and outstanding IP analysis the PRISM family is known for.

The MPP software also includes a unique feature that makes it incredibly powerful for post-production colorists. Telestream has been offering the ability to apply a false color overlay to the picture display to indicate areas of an image that are outside of a specified color gamut. With the new software being released as part of the MPP instruments, it is now possible to determine how far from the Rec-709 or DCI-P3 boundaries an out-of-gamut color is. The picture display is monochromatic for all colors that are within the gamut. The false color overlay indicates colors that are near, but beyond, the Rec.709 or DCI-P3 boundary in one color and those close to the Rec-2020 boundary in another. Colorists can adjust the necessary colors until the colored highlights are eliminated, with the peace of mind to be confident that their entire image is compliant to the desired color space.

WebRTC remote connectivity provides access through a web browser with the same level of performance and functionality (including audio) as sitting in front of the instrument. As they can be mounted in an equipment room and accessed via KVM or WebRTC network connectivity, the MPP models are also ideal for live and remote production operations.

As with the rest of the PRISM family, the MPP line provides a "no penalty" software upgrade path to add additional features as required and as new developments take place.

Telestream will demonstrate the PRISM MPP line for the first time at NAB 2023, booth W1501, where visitors will see the company's solutions for content creation and production, distribution and monetization. The PRISM MPP line is planned for worldwide availability in Spring 2023.

SEE WHAT COMES NEXT

Join us at NAB Show, *THE GLOBAL EVENT* for the broadcast, media and entertainment industry. Preview powerful technology, best-in-breed products and innovative solutions for your every next.

And — it's our Centennial… an incredible, must-not-miss celebration! Exclusive international benefits and private-access perks are all yours. *REGISTER NOW* with code ID47.

For more information, contact NAB Show's in-country representative, Anushree Ramchandani at 9811065185, aramchandani.nabshow@gmail.com.

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All things data, AI and automation.

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TOP PRODUCTS & SOLUTIONS
In The Broadcast & Post Production Sector

Broadcast & Film collates new product launches from the world of broadcast. The products are from a broad spectrum which includes IP, Lighting, Cameras, Graphics, Storage. Leading and reputed brands introduced game-changing products and solutions that added new features.

The new Adobe Creative Suites release features several new tools for titles, graphics and animation in Premiere Pro and Character Animator. It also includes performance improvements and workflow refinements in Premiere Pro that will help editors keep their creativity moving.

Adobe Creative Cloud enable

ADOBE CREATIVE SUITES

businesses to create toolkits and distribute them across promo teams globally, all accessible through an Adobe panel in whatever application they are using. If an asset has to be updated,

the graphics department makes the changes once in the share library and the toolkits are updated, globally.

Adobe Team Projects, which is included with Creative Cloud

Teams and Enterprise accounts, allows multiple users to work on the same Premiere Pro or After Effects project, wherever they are in the world. Each time a user makes a change, the project can be synchronized, giving collaborators the chance to accept or reject changes. This workflow is important as broadcasters look to virtualize their Adobe toolset. For example, a Team Project can be set up to allow users to edit either on-premise and on a cloud-based Virtual Machine. With the cloud instance, users anywhere in the globe can put together a rough-cut story that can then be shared with an on-premise facility to be finished locally. This workflow opens up opportunities for on location edits, which in-turn speeds up project completion and reduces editorial overheads. Combined with technologies such as NDI video streaming and smart cloud architecture, it provides users with a true collaborative, over-the-shoulder experience, regardless of their location.

MAXON CINEMA 4DS24

Maxon, the developers of professional software solutions for motion designers and visual effects artists, announced Cinema 4D Subscription Release 24 (S24). The latest subscription-only release of Maxon's 3D application allows users to easily browse and obtain models, materials and other assets, and to intuitively place them within the scene. The release also includes key workflow enhancements and a sneak peek at continued progress on the Scene Nodes and Scene Manager interfaces to the new core. Cinema 4D S24 is immediately available for subscription customers. For perpetual license holders of Cinema 4D a release is scheduled later this year that will incorporate the features of S24, as well as future enhancements.

Cinema 4D S24 sets the stage for creativity with intuitive and powerful tools for placing objects within a scene. Creating an environment, adding props and creative exploration is as simple as dragging-and-dropping objects onto one another, painting objects onto a surface, or allowing objects to fall into place with the help of dynamics.

Cinema 4D S24 adds more powerful animation workflow enhancements and builds upon the success of character animation features introduced in R23. Everyone who creates keyframes will enjoy improved curve evaluation and other workflow enhancements, while Character Animators will enjoy even more powerful retargeting and pose workflows.

Experience first-hand how things are taking shape as work continues on Cinema 4D's new core. Cinema 4D S24 introduces the Scene Manager, the spiritual successor to Cinema 4D's Classic Object Manager. Use powerful node-based assets to construct procedural geometry or entire scenes in this new hierarchy-based view or view the same objects in a continually evolving Scene Nodes editor.
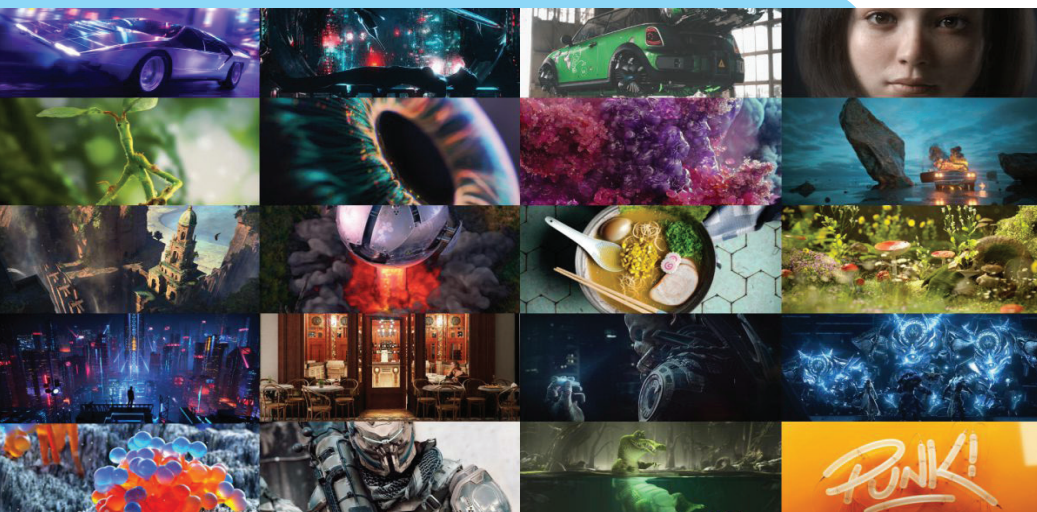
AAJA VIDEO SYSTEMS BRIDGE NDI 3G

Aaja Video Systems launched BRIDGE NDI 3G, a sleek, high-performance 1RU appliance that enables reliable, high density, and high quality conversion to/from SDI and NewTek's NDI® video over IP protocol. The flexible, intuitive gateway device supports multi-channel 4K and HD workflows and is designed to help broadcast, production and proAV professionals move seamlessly between various platforms, protocols, and connectivity types. BRIDGE NDI 3G packs a punch with dual 10GigE onboard NICs for NDI I/O and remote control over the web, as well as high-density SDI connections for up to 16 channels of 3G-SDI I/O – offering up to four channels of 4K or 16-channels of HD, or a mixture of HD and 4K NDI encodes/decodes in a compact form-factor. The device boasts an intuitive interface and system administration screen that make it simple to get BRIDGE NDI 3G up, running, and configured quickly and securely. Using a standard web browser, technicians, engineers, operators, and producers can access the interface remotely to view and manage content, including local monitoring preferences. Operators are also able to freely browse, favorite, label, and filter a large volume of NDI sources on the network, as well as label any SDI inputs or outputs, and see all I/O activity at any given time.

BRIDGE NDI 3G can easily be used to convert SDI camera and playout sources into NDI streams, enabling simple integration into NDI supported workflows, including virtualized productions leveraging NDI-based switchers. Using a common network, these sources can be located anywhere within a facility, allowing seamless integration of various production islands into a unified workflow. Conversely, NDI streams can be converted back into SDI ecosystems via BRIDGE NDI 3G's configurable I/O, allowing NDI signals to move back into SDI routing systems and traditional baseband workflows.

ROSS VIDEO STREAMLINE ASSET MANAGEMENT

Streamline is the next generation of asset management. Built on top of the Ross Video web technology platform, Streamline is a web-based software product that integrates seamlessly with the Ross XPression graphics system, and allows users to attach assets to graphic templates via a simple drag and drop workflow. The software also offers a rich variety of asset metadata allowing users to easily organize and search their graphics, greatly reducing the effort required to find and reuse content between productions.

Robust reporting tools in Streamline provide up-to-the-second data visualization of any metrics in the workflow process. Insights can be used to better allocate resources to the areas of greatest overall benefit to the organization. Streamline reporting allows monitoring of details like order types, deadlines, ordering trends, most ordered asset types, cycle times and more.

Streamline also provides the ability to manage and prioritize graphics production through its order management system. The system offers placeholder workflows for graphics that, when fulfilled by the art department, are automatically delivered by Streamline into the XPression template and ready to air.

RIEDEL MEDIORNET COMPACT

MediorNet Compact is the cost-effective and easy-to-use entry to the Riedel MediorNet world of integrated media signal distribution and processing.

It is the first fiber-based 21st-century stage box providing the flexibility of a true real-time media network including integrated signal processing at the cost of simple multiplexing point-to-point products. With a network bandwidth of 50 Gbit/s MediorNet Compact provides enough capacity for bi-directional transport of 12 HD-SDI signal, dozens of MADI streams or GBit-Ethernet signals and hundreds of audio channels or intercom ports – ideal for streamlining the infrastructure of any mobile, studio or live event application.

LITEPANEL GEMINI 2X1 HARD RGBWW LED PANEL
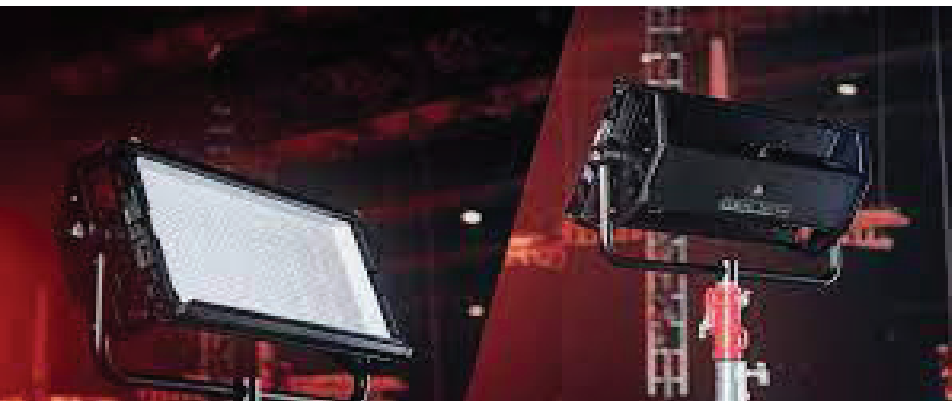
Litepanels® are the original pioneers in LED panel lighting for the television and motion picture industries. Starting with the original 1x1 LED panel, we have built on the phenomenal success of that light to develop ever-more innovative lighting solutions including: on-camera lights, Fresnels, RGB special effects lighting and advanced wireless control systems to become the first name that gaffers, DPs and cinematographers think of when it comes to lighting with LED.

The newest addition to the Litepanels range is the Gemini 2x1 Hard RGBWW LED Panel, the brightest and lightest 2x1 panel on the market.

Gemini 2x1 Hard is brighter than any other 2x1 panel, delivering up to 23,000 lux @10ft/3m of output from a lightweight, compact fixture. Cinematographers and Gaffers can control and modify their setups without compromising on source. Gemini 2x1 Hard shifts from an intense 20° beam to a soft wrap-around light with diffusers included in the box, and still offers scope for many more layers. Lower power draw of max. 500W offers the possibility of battery power, while minimising overall power consumption of the production.

Gemini 2x1 Hard is already being used on major drama and feature film productions worldwide

ARRI ORBITER LED FIXTURE

Arri Orbiter is an ultra-bright, tunable, and directional LED fixture from ARRI. All systems in Orbiter are completely new and designed with versatility in mind. Orbiter's new six-color light engine delivers a wide-color gamut and outstanding color rendition across all color temperatures along with industry-leading, smooth dimming from 100 to 0%. With its changeable optics, Orbiter can transform into many different types of lampheads including open face, soft light, domes, and other future possibilities. Orbiter's state-of-the-art technology and versatile design makes it an optimal lamphead for today and for the future with endless possibilities for updates, configurations, and enhancements.

Redesigned from the ground up, the Orbiter control panel is an evolutionary step in light fixture control. Including a 4" full-color display, quick navigation buttons, and integrated sensors, the Orbiter control panel allows for easy use with a graphic user interface. Simplified menu structure and reimagined user interfaces provide one-glance operational views and uncluttered screens. This intuitive design makes changing colors or finding a setting easier than ever before while still maintaining the powerful features Orbiter has to offer. In addition, the control panel is removable and can be used handheld with the aid of a 5 or 15 m (16.4 or 49.2 ft) control panel cab

CANARA 200W LED FRESNEL SPOT DAY LIGHT

Canara understands the exacting needs of Film Studios and provides ideal customized solutions using its wide array of lighting fixtures, grid/rigging system, DMX network, dimmers, cable management and lighting consoles. Technical proposals are provided for both indoor & outdoor shooting requirements keeping in mind easy movability and weight. Customer training, installation, testing and after sales are all part of the service offered by Canara.

Canara 200W LED Fresnel Spot Day Light is a High quality Canara LED Fresnel light used as a Keylight, Backlight, Fill light with dimming, spot & flood focus versions for creating various effects for multiple applications.

200W LED equivalent to 1000W Halogen.

❖ Brightness is controlled through DMX mode and Manual mode and integrated dimmer enables smooth dimming from 0 to 100%.

❖ Temperature is controlled by active cooling system having uniquely designed heat sink.

❖ Aluminium die cast and extrusion sheet housing with 7 tank Rusto cleaning, black powder coat matt finish paint.

❖ Delivers uniform field across the entire beam from spot to flood.

❖ Available with pole operated yoke.

❖ CE Certified lighting fixture.

FORA 4K/HD VIDEO SWITCHER
HVS-6000/6000M

Designed for use in 4K(UHD) systems, the HVS-6000 brings 12G-SDI compatibility to all inputs and outputs. Users can operate the unit in the same manner as current HD systems. In an era of video over IP, the HVS-6000 anticipates these needs and enables IP interfaces to be mounted on all I/O slots*.

Features

Up to 80 in/32 out or 64 in/48 out, all inputs and outputs support 12G-SDI Single Link.

IP input/output support planned for future use.

3 M/Es with split M/E, 4 keyers per M/E. Frame synchronization and still store available for inputs.

Upconversion*1*2 from HD to 4K on all inputs and downconversion*2 from 4K to HD on all AUX outputs are supported.

Control panels: HVS-2120ROU, HVS-2240OU, HVS-3320OU and HVS-3355OU (custom-ordered).
*1 To be supported.*2 Optional.

GRASS VALLEY K-FRAME SWITCHERS

Grass Valley's K-Frame video processing engine provides a wide range of functionality,

power, and flexibility. Powering massive processing capacity for keyers, transitions, and scalers with simplified operational tools such as DoubleTake and Transition Chaining, K-Frame provides efficient operations, simplified production workflows, as well as easy configuration and setup. Features including modular I/O and simple to install software licenses enable the system to grow to suit both present and future needs.

Features

❖ K-Frame Standard Frame.

❖ Up to 192 inputs and 96 outputs.

❖ Up to 9 M/Es, accessible across two suites — by using DoubleTake this may be increased to 18 virtual M/Es.

❖ Every M/E has six keyers with standard keying modes including chromakey, two frame stores per keyer — every keyer except for Controller M/E can use the pool of floating 3D iDPMs.

NEWTEK TRICASTER TC1

The most complete production system available today, Newtek's TriCaster TC1 represents the continued innovation of the iconic product that defined an industry. Designed with the way you work in mind and equipped with hundreds of advanced production capabilities, it has everything you need to do video your way today—and tomorrow.

Features

❖ Switching, streaming, recording in HD, 3G, and 4K UHD 60p.

❖ Native software driven processing for maximum production power and flexibility.

❖ Comprehensive camera coverage and compelling multi-source video mixing, including 16 external inputs and 4 M/Es.

❖ Studio-grade Skype® video calling with multi-channel Skype TX software integration.

❖ Integrated video servers allowing playback, replay, and live editing without any additional hardware.

❖ Multi-channel ISO recording to full-resolution QuickTime® and H.264 files for VOD, post-production, and archive.

❖ Dual-channel live streaming to Facebook Live, Microsoft® Azure®, Periscope, Twitch, YouTube™ Live, and more.

❖ Real-time social media sharing to Facebook, Imgur, LinkedIn, Twitter, Vimeo, YouTube, and more

❖ Powerful production automation with custom macro commands, sophisticated full-motion compositing, and flexible control options.

❖ Advanced audio mixing with multi-source configuration and control, professional DSPs, and 4 x 4 x 4 channel routing.

❖ Premier creative capabilities, including multi-bus mix effects, animated titles and transitions, advanced chromakeying, spectacular live virtual sets, and more..

AVID'S NEXIS SOFTWARE DEFINED STORAGE PLATFORM

Avid NEXIS | E5 is an enterprise-class, hyper-dense storage engine that offers real-time editorial collaboration and the highest levels of scalability, performance, and client connections for large-scale broadcast and post-production environments. Avid NEXIS | E5 provides 40GbE connectivity and 80–480 TB of storage capacity per engine, with the ability to scale up to 1.4PB of capacity and 9.6GBps of bandwidth, supporting more than 2000 Avid DNxHR HD streams or 500 Avid DNxHR 4K streams across over 300 connected clients in a mere 17U of rackspace. The Avid NEXIS hardware family is shown below:

Avid's NEXIS software defined storage platform for storing and managing media leverages the company's MediaCentral Platform. Avid NEXIS provides dynamic virtualization, adaptive protection, and media-savvy collaboration so media organizations of all sizes can accelerate production and increase efficiency. Recent additions to the NEXIS family provide high density and high availability solutions solutions. In a continued move to a more open editing environment Avid says Avid NEXIS work with the top media creation applications, including including Media Composer, Pro Tools, Apple Final Cut Pro X, Adobe Premiere Pro CC and Grass Valley EDIUS. Avid also says that NEXIS will work with cloud storage as well as local storage.

EDITSHARE EFS SHARED STORAGE PLATFORM

EditShare updated its EFS Shared Storage platform. According to the company, with this launch, the EFS storage platform enables users to mix and match high performance SSD, performance-optimized HDD, and cost-optimized HDD nodes in any combination. Accompanying this are powerful Storage Goal features and an expanded suite of file protection schemes that enable users to match the degree of fault tolerance with the value of the media assets on a workspace-by-workspace or project-by-project basis.

With the EFS updates users can dynamically define the combination of storage technology and file protection that is applied to media and project spaces. Within an XStream EFS storage cluster, users can define semi-autonomous Node Groups that can be based on HDD or SSD technology. Previous XStream EFS configurations supported only XOR2, XOR3 and XOR4 file protection schemes that could tolerate the loss of a single EFS storage node.

STUDIO NETWORK SOLUTIONS (SNS) EVO SHARED STORAGE WORKFLOW SOLUTION

Studio Network Solutions (SNS) EVO shared storage workflow solution is purpose-built to enable creative workflows for media production teams working in the studio, remotely, and in hybrid on-prem/off-prem environments.

The new EVO Suite features will enhance the content creation workflow for EVO users around the world.Creative teams will enjoy faster transcoding with updates to Slingshot, easier search and navigation features in ShareBrowser, a dramatically improved remote editing experience with the all-new Nomad, and remote connectivity speeds of up to five times faster with VPN Accelerator for SNS Cloud VPN

ROSS VIDEO INTERSTELLAR PRODUCTION PORTAL
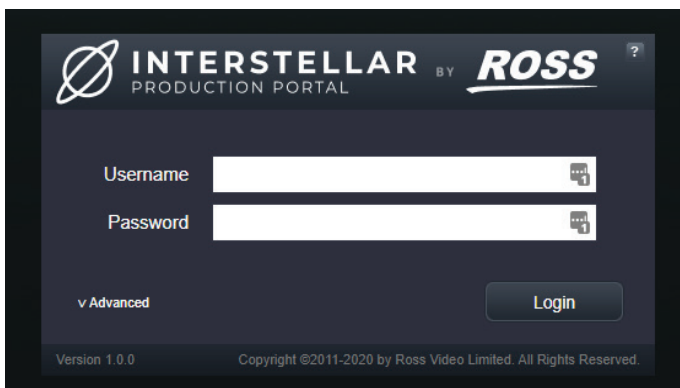
Ross Video Interstellar provides an intuitive user experience that allows remote contributors to send high quality, low latency video to existing production infrastructure. Interstellar integrates with your existing production switchers, routers and workflows through standard SDI connectivity.

After clicking a link to join a remote studio, remote contributors have low-latency interactions, share high quality video and screens.

When a contributor wants to engage with the host of a production, they can maximize the host's video stream.

Interstellar helps diagnose the common issue of lack of bandwidth by allowing remote contributors to conduct speed tests and by ensuring contact information is always available.

During a production, operators are given a view that allows them to monitor the streams being used in the remote studio, including video, audio, ifb and talkback from all contributors.

Interstellar can integrate with existing intercom systems using a standard 4-wire interface to give the full IFB/Talkback experience to broadcast professionals working remotely.

Interstellar can optionally be integrated with existing LDAP systems to support same sign-on or use a local system. This allows users to use existing network credentials to login

IMAGINE COMMUNICATIONS NEXIO NEWSCRAFT

Imagine Communications has announced the launch of Nexio NewsCraft, an all-in-one news production solution that is remote production friendly and enables organizations to work smarter and more efficiently so that every news story gets to air quickly.

Nexio NewsCraft provides a feature-rich and intuitive toolkit in a single, highly automated solution that streamlines news production from ingest and preparation to playout and delivery over multiple platforms, the company said.

Based on proven open standards, Nexio NewsCraft operates seamlessly in hybrid SDI/IP architectures, interfaces tightly with newsroom computer systems (NRCS) via a fully implemented MOS interface, and allows access to systems on-prem, in the field or from home.

The solution combines the field-proven performance and reliability of MOS-enabled Nexio production servers and IOX shared storage with the modern, easy-to-use GUI and best-in-class media management capabilities of the EditShare FLOW family, Imagine reported.

Multiple software tools can be layered on the server architecture, giving wide and fast access to content and empowering journalists by removing technical and operational constraints wherever they access the functionality. As needed, artificial intelligence tools like automated metadata extraction can be added to facilitate increased productivity and monetization of assets.

As a system purpose-built for speed, Nexio NewsCraft enables crash recording to be started with a single button on the control screen; scheduling a recording is as simple as dropping an event in a calendar. No matter how the content is ingested, material can be played out or edited within seconds of recording starting.

SONY VENICE 2 DIGITAL CINEMA CAMERA

Sony VENICE 2, the new flagship model and latest addition to its line-up of high-end digital cinema cameras. The VENICE 2 sbuilds upon the strength of the original VENICE with new features including a compact design, internal recording and the option for two different sensors: the newly developed full-frame 8.6K sensor or the original 6K VENICE sensor. The VENICE 2 also inherits popular features from the original VENICE including colour science, Dual Base ISO and 8-stops of built-in ND filters.

Paired with a newly developed 8.6K (8640 x 5760) full-frame CMOS image sensor, the VENICE 2 offers excellent image quality with 16 stops of total latitude[i] to capture beautiful images with excellent colour separation and shadow detail. The camera also inherits its colour science from the original VENICE, which is highly regarded for its natural skin tones. The VENICE 2 8K CineAlta camera has a unique dual base ISO of 800/3200 which allows filmmakers to capture incredibly clean, film-like images under a wide range of lighting conditions. It supports everything from full-frame, full-frame anamorphic[ii] to Super35, all at a minimum of 4K resolution, resulting in an outstanding and versatile camera system for cinematographers and productions.

CANON PTZ CAMERAS

Canon PTZ cameras support 4K UHD resolution as standard, with 4K optics to ensure high imaging quality. With more Content Delivery Networks (CDNs) supporting 4K UHD streaming, as well as 4K becoming standard in broadcast workflows, Canon's solutions deliver the image quality and immersive experience today's viewers expect.

Drawing on Canon's expertise in pro video and cinema cameras, the PTZ cameras incorporate proven focusing systems for flexibility and speed of focusing: Hybrid AF in the CR-X300 and CR-N300, and Canon's industry-renowned Dual Pixel CMOS AF in the CR-N700, CR-N500 and CR-X500. As the flagship model in the Canon PTZ camera range, the CR-N700 is equipped with the most sophisticated autofocus system. It uses EOS iTR AFX deep-learning AI for incredibly accurate face and head detection, as well as Eye AF that tracks a person's eyes automatically.

Like the Canon XF605 professional camcorder, the CR-N700 pairs a 1-inch 4K UHD CMOS sensor with a DIGIC DV7 image processor for improved performance and image quality. This combination delivers high-end, broadcast-ready 4K 60p footage at 10-bit 4:2:2. The CR-N700 also packs a powerful 15x optical zoom and a 30x Advanced Zoom that pulls viewers into the heart of the action.

As a robust outdoor PTZ camera that delivers 4K UHD resolution and IP streaming, the CR-X300 breaks new ground for the PTZ market. Its 1/2.3-inch CMOS sensor and 20x optical zoom deliver exceptional image quality, and its support for a range of control protocols mean that it's easy to integrate the CR-X300 into an existing remote camera setup.

Content Chain Trends
Content Distribution & Monetization

The OTT players are relooking at the entire business model and overall there is a consolidation happening in the market. Omax estimates that the industry is expected to touch $ 11-13 billion by 2030 and the primary driver for growth will be paid subscriptions or SVoD (subscription video-on-demand) segment slated to jump from 85-90 million to 160-165 million by 2027. There is a course correction strategy being adopted by the players to stay afloat and agile in the midst of a looming recession.

Contents

State of Content Distribution & Monetization
○ Investment in Publish, Monetize, and Consume
○ Technology Drivers

Business and Tech Trends
○ Changing Viewing Habits
○ Digital Transformation
○ Streaming Maturity
○ Convergence
○ Aggregation

Content Distribution Tech
○ Linear Playout
○ Non-Linear Publishing
○ Content Protection
○ Linear Signal Distribution
○ Internet Distribution

Content Monetization Tech
○ Advertising Systems
○ Advertising Systems - Programmatic advertising
○ Advertising Systems - SaaS-based cross-platform ad measurement
○ Micro-payments
○ User Experience

State of Content Distribution & Monetization
Investment in Publish, Monetize, and Consume

Investment in Publish and Monetize recovered in 2022 after the decline in 2021, making Monetize and Consume the top investment areas in the BaM Content Chain.

PUBLISH   NET outlook
2022   52%
2021   29%
2020   36%

● Growing ● Stable ● Declining

MONETIZE   NET outlook
2022   73%
2021   42%
2020   45%

● Growing ● Stable ● Declining

CONSUME   NET outlook
2022   55%
2021   63%
2020   54%

● Growing ● Stable ● Declining

Change in NET investment outlook
NET = Growing - Declining, Change 2021 - 2020 is illustrated on the chart

30%
20%
10%
0
-10%

Create | Produce | Manage | **Publish** | Monetize | Consume | Connect | Support | Store

● NET change 2021-20   ● NET change 2022-21

Sources: IABM

State of Content Distribution & Monetization
Investment in Publish

Fastest-growing areas of investment in Distributing Content in 2022

Non-Linear Publishing (OTT, VOD)
Distribution & Re-distribution (encoding, edge devices)
Internet Distribution (Website, Mobile, Apps)
Internet Distribution (CDNs)
IPTV Distribution
Internet Distribution Platforms (Social Media)
Linear Playout (automation, master control)
Content Protection & Encryption
Terrestrial Distribution
Satellite Distribution
Large LED Screens
Cable Distribution
Venue Exhibition (projectors, LED screens)

0   5%   10%   15%   20%   25%   30%   35%   40%   45%   50%   55%

Non-linear publishing and multi-platform internet distribution are driving investment in Publish.

Q. Please select the fastest-growing areas of investment in Publishing Content from your perspective.

Sources: IABM

State of Content Distribution & Monetization

Investment in Monetize and Consume

Fastest-growing areas of investment in Monetizing & Consuming Content in 2022

Programmatic Advertising Platforms	
Rights Management	
Advertising Analytics	
Advertising Sales	
Personalization/ Recommendations	
Data Analytics	
Consumer UI and UX Design	
Scheduling	
Subscription & CRM Systems	
Traffic	
Consumer Identity Management	
Content Planning	
Consumer Apps	

0   5%   10%   15%   20%   25%   30%   35%

Programmatic advertising, rights managements, as well as advertising analytics, sales, and personalization are driving investment in Monetize. Investment in Consume is driven by consumer UI/UX design.
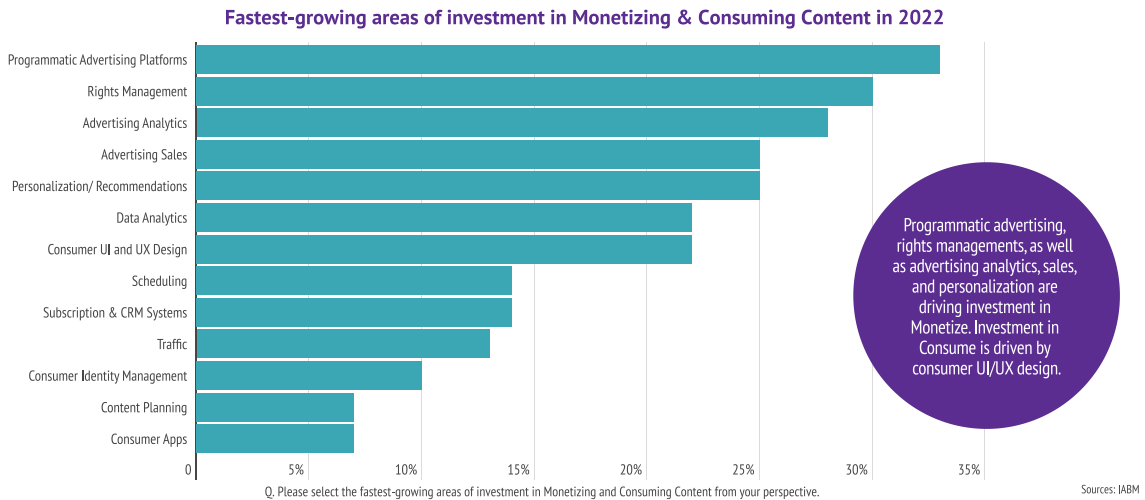
Q. Please select the fastest-growing areas of investment in Monetizing and Consuming Content from your perspective.

Sources: IABM

State of Content Distribution & Monetization

Technology drivers

Investment drivers in Publish

OTT & Streaming Platforms	
Cloud & Virtualization	
IP Transport & Networking	
Social Media	
Imaging	
Next-Gen Standards (ATSC 3.0)	
Remote Production	
Immersive	
AI/ML & Analytics	
Targeted Advertising	
Blockchain	
IoT	
Edge Computing	

0   5   10   15   20   25   30   35

Investment drivers in Monetize

OTT & Streaming	
Targeted Advertising	
AI/ML & Analytics	
Cloud & Virtualization	
Social Media	
Blockchain	
Security	
IP Transport & Networking	
Gaming/Esports	
Remote Production	
Imaging	
Mobile (5G)	
Next-Gen Standards	

0   5   10   15   20   25   30   35

Investment drivers in Consume

OTT & Streaming	
Cloud & Virtualization	
Social Media	
Immersive	
Targeted Advertising	
Gaming/Esports	
Mobile (5G)	
Remote Production	
IP Transport & Networking	
AI/ML & Analytics	
Blockchain	
Next-Gen Standards	
Edge Computing	

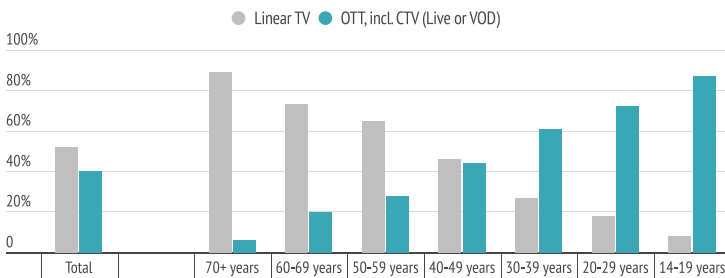0   5   10   15   20   25   30   35

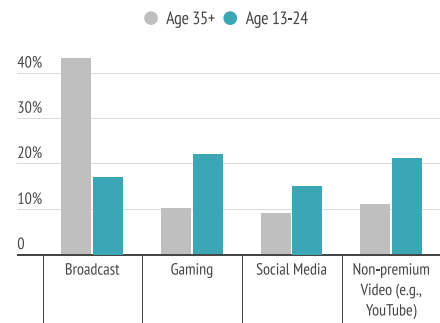Sources: IABM

Business and Tech Trends
Changing viewing habits

Viewing and entertainment habits are changing as a result of the ongoing digital transformation. There is a clear generational shift, with younger viewers preferring to watch content via OTT channels. However, as noted by ProSiebenSat.1 in their presentation, the decline of traditional TV doesn't mean the decline of TV content, which is increasingly used via OTT platforms.

Primary "source of supply" of video content in Germany, 2022

Legend: ● Linear TV ● OTT, incl. CTV (Live or VOD)

Categories: Total, 70+ years, 60-69 years, 50-59 years, 40-49 years, 30-39 years, 20-29 years, 14-19 years

Entertainment habits in 2022, by generation

Legend: ● Age 35+ ● Age 13-24

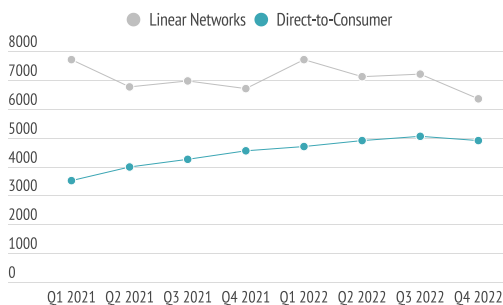Categories: Broadcast, Gaming, Social Media, Non-premium Video (e.g., YouTube)

Sources: IABM, Source: Digitalisierungsbericht Video 2022, die Medienanstalten, Hub Entertainment Research
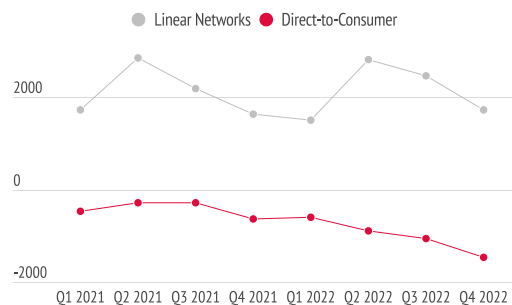
Business and Tech Trends
Digital transformation

The increasing preference for OTT channels puts pressure on traditional media businesses' revenue streams, and they are responding by launching their own OTT services, therefore streamlining investment in linear technology in favor of streaming tech, even though the direct-to-consumer segment has been loss-making for many media businesses until now.

Disney's DTC and linear revenue over 2021-22

Legend: ● Linear Networks ● Direct-to-Consumer

Categories: Q1 2021, Q2 2021, Q3 2021, Q4 2021, Q1 2022, Q2 2022, Q3 2022, Q4 2022

Disney's DTC and linear operating income/loss over 2021-22

Legend: ● Linear Networks ● Direct-to-Consumer

Categories: Q1 2021, Q2 2021, Q3 2021, Q4 2021, Q1 2022, Q2 2022, Q3 2022, Q4 2022

Sources: IABM

Business and Tech Trends
Streaming maturity

The streaming boom, driven by the pandemic, resulted in a highly fragmented OTT space. Streaming competition forced viewers to stack subscriptions to access content scattered around different platforms, which, coupled with inflation, led to a subscriber growth slowdown at the largest SVOD platforms, such as Netflix and Disney+.
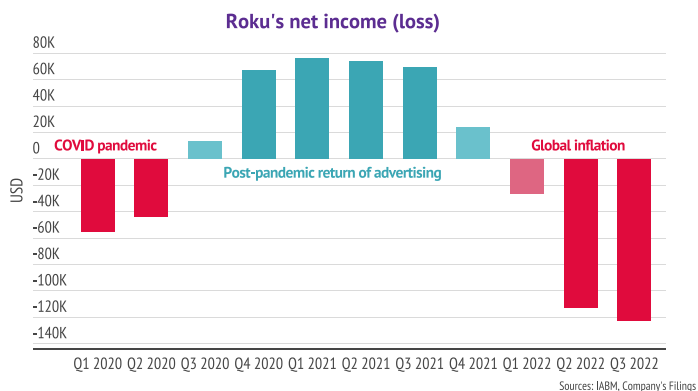
Netflix subscribers' growth

Disney+ subscribers' growth

Sources: IABM
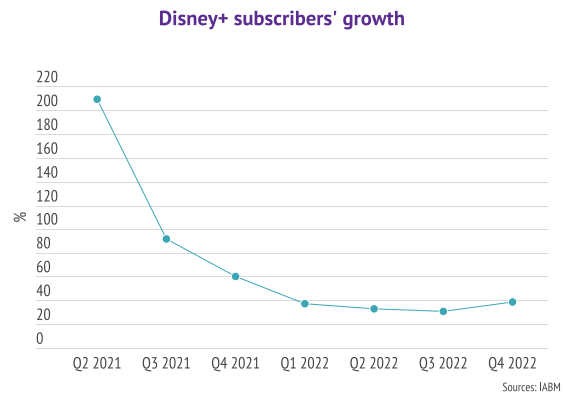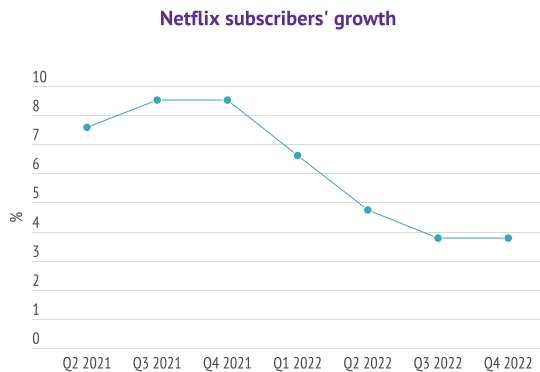
Business and Tech Trends
Streaming maturity

SVOD platforms are responding to consumer churn by diversifying revenue streams and launching ad-supported offerings, compensating for consumers' reduction of discretionary spending, driven by macro headwinds. For example, Kantar's consumer research finding states that 38% of Netflix cancellations in Q3 2022 were due to cost.

AVoD and FAST (free ad-supported streaming television) remain the fastest-growing business models in streaming. According to Kantar's research, while SVoD declined 1% quarter-on-quarter to reach 82% of U.S. households in 2022, both AVoD and FAST grew by 1 percentage point, to 28% and 24% household penetration, respectively. However, the profitability of ad-supported streaming platforms is also facing headwinds with global inflation, as evidenced by Roku's losses in 2022.

Roku's net income (loss)

COVID pandemic

Post-pandemic return of advertising

Global inflation

Sources: IABM, Company's Filings
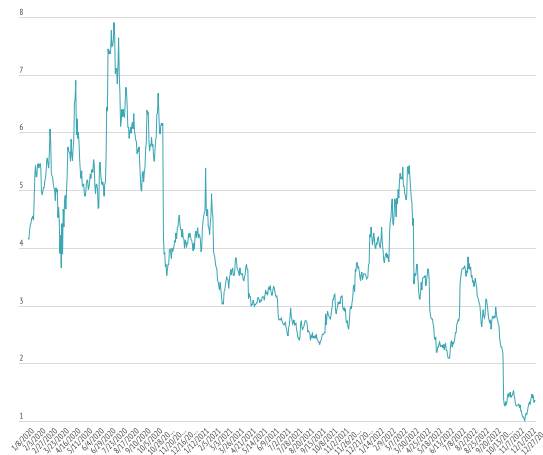
Business and Tech Trends
Streaming maturity

The stock price of Edgio (former Limelight Networks) highlights the effects of volatile streaming patterns on media tech suppliers. It boomed again in the first quarter of 2022, retreating in the second quarter after subscriber growth slowdown in Q1 2022 was reported, and Netflix's subscriber growth continued to decline - from 7% in Q1 2022 to 5% in Q2 2022 down from 9% in Q4 2021.

"

Our largely fixed cost structure, coupled with a concentration of large video streaming clients results in the suboptimal network utilization. Our network has a high demand for a relatively short period of 4 to 6 hours each evening in each region. While this remains true, our cash gross margin will have a high sensitivity to overall demand patterns and network utilization.

Daniel Boncel, Limelight CFO, Q2 2021 earnings call

**Edgio (Limelight Networks) stock price, 2020-2022**

Sources: IABM, Company Filings

Business and Tech Trends
Convergence

The generational shift in media consumption discussed earlier in this report puts gaming and consumer interactivity at the center of the media ecosystem, improving user engagement and generating new revenue streams. Interactive features require the exchange of a variety of data types, and this data can be utilized, and monetized, as well as create value by sharing cross-platform data.

Demand for interactivity has soared
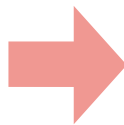
Consumer Interactivity

While supply has never been in a better shape
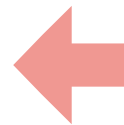
Social isolation has been driving increasing demand for interactivity

Tech enablers such as AI/ML, 5G/edge, XR facilitate effective supply

The increasing demand for interactivity is reflected by the soaring usage of social platforms such as Twitch and Clubhouse, while supply now has the tools to cater to it, which it didn't in the past.

Sources: IABM

Business and Tech Trends

Convergence

Number of active streamers on Twitch worldwide, 2018-2022

Number of weekly active Clubhouse users, 2020-2021
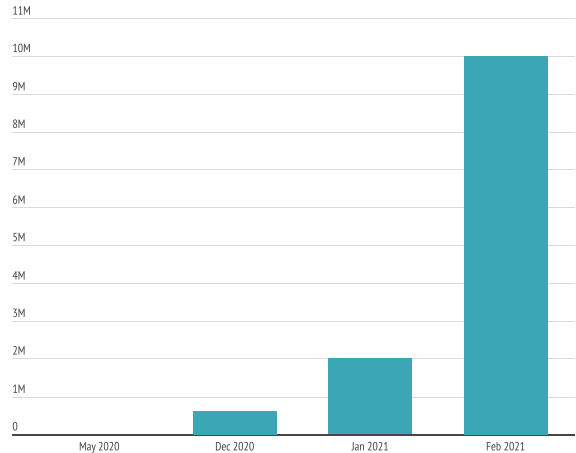
Sources: IABM, Companies' Filings

Business and Tech Trends

Convergence

The convergence of different sectors of the M&E industry, such as gaming, betting, social media, etc., is driving investment in technologies that are not media-specific – either by acquiring complementary tech businesses or by developing technology internally.
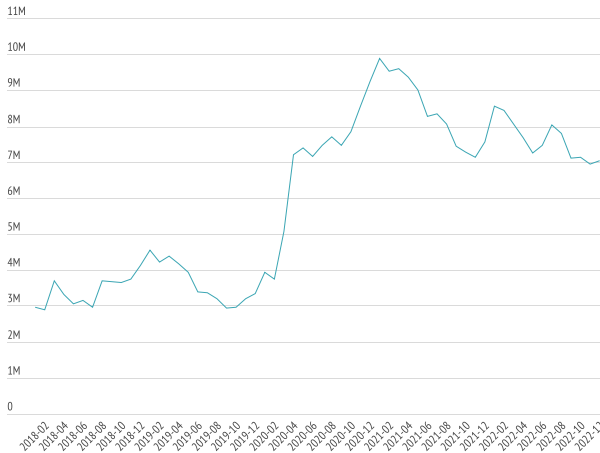
NETFLIX

Acquisitions of Boss Fight, Night School and Next Games to launch gaming offering free to existing subscribers and rollout of interactive content

Bally

Acquisitions of Telescope, GamesysGroup and SportsCaller with a particular focus on gaming and betting for consumer engagement

DAZN

Acquisition of Texel, launch of DAZN X and appointment of new CTO to increasingly focus on betting, gaming and e-commerce

Disney

Hired gaming exec from Apple to lead its next-gen division and is developing an app and wider engagement proposition for ESPN

Most initiatives aim to augment/diversify revenues through better engagement

Sources: IABM

Business and Tech Trends

Aggregation

Recently, several media companies have moved toward super aggregation and launched their own smart TVs and streaming devices. For example, Sky launched its own smart TV, Sky Glass, in October 2021, providing its subscribers access to a collection of top streaming services like Netflix, Amazon Prime, and Disney+, as well as content from other UK broadcasters like the BBC, ITV and Channel 4. Amazon also launched its first branded TV sets - Amazon Fire TV Omni and Amazon Fire TV 4 - in October 2021. These initiatives show how the living room has become the key contact point with viewers because those content providers who control the device-based data analytics also control the whole UX/UI - and the whole media supply chain. Accordingly, broadcasters and Pay-TV operators are coming together to create bundled SVOD services, which add value through their combined brands. For example, the BBC and ITV are partnering around Britbox and the FreeWheel app, uniting all the UK's terrestrial broadcasters on iOS and Android. Many Pay-TV operators are onboarding SVODs to their platforms to provide viewers the convenience of content all in one place. By onboarding new, smaller SVODs, Pay-TV operators can extend their content libraries while offering a large audience for these SVOD newcomers in exchange. Super aggregators attract viewers with direct billing options to control payment terms, margins, and viewer data. Such "hard" bundling, where subscribers only pay for the SVOD service through their aggregator, is becoming increasingly popular.

Sources: IABM, Omnicom Media Group, IBC365

Content Distribution Tech Trends

Linear Playout

The streaming boom has strengthened digital polarization in the post-pandemic period, which is reflected in our data on media businesses' revenue outlook – very positive for OTT players and moderate for broadcasters and Pay-TV operators. To respond to the changing viewing habits, broadcasters and Pay-TV operators are embracing cloud technology, which allows them to deliver their content to various platforms, both linear and OTT.

Revenue outlook by media businesses, 2021-22

■ Revenues will increase
■ Revenues will decline

Until recently, OTT was a synonym for on-demand content, with SVOD and AVOD being the two main business models in OTT. However, with the increasing fragmentation and competition in the streaming space, coupled with global inflation, subscription stacking is reaching the ceiling, paving the way for the FAST channels (live ad-funded TV channels delivered over the top).

Sources: IABM

Content Distribution Tech Trends
Linear playout

Cloud playout allows broadcasters and Pay-TV operators to deliver content to various distribution platforms across traditional broadcast and OTT platforms, including connected devices (aggregators of linear and on-demand content). Cloud playout allows broadcasters to roll out new channels quickly on an OPEX basis rather than investing in hardware. The ability to imp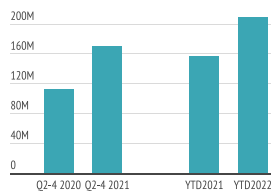lement changes on the go helps broadcasters and Pay-TV operators to react to new market conditions faster, localize their content better, and deliver personalized programming. Cloud playout plays an important role for FAST channels, as it allows the creation of the linear playout by stitching VOD content, replicating traditional linear TV.

Roku's global active accounts

240M					
200M					
160M					
120M					
80M					
40M					
0	FY2018	FY 2019	FY2020	FY2021	YTD2021 YTD2022
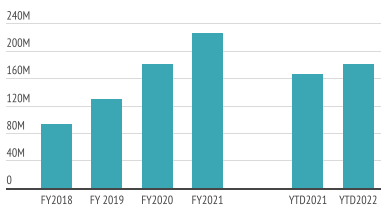
* YTD (year-to-date) - first 9 months of the year (Q1-Q3)

Pluto TV's global active accounts

200M				
160M				
120M				
80M				
40M				
0	Q2-4 2020 Q2-4 2021		YTD2021 YTD2022	

> Pay-TV providers everywhere are recognizing the advantages of cloud TV as the optimal engine for offering Over-The-Top (OTT) services as part of a super-aggregation strategy, and the best way to reach audiences wherever they are.
>
> Nuno Sanches, GM of Media and Telecom, Kaltura, December, 2021

Sources: IABM

Content Distribution Tech Trends
Non-linear publishing

Changing viewing habits and the growing number and variety of delivery platforms are driving investment in non-linear content delivery.

As media companies are speeding up their migrations to the cloud, public cloud service providers like AWS are launching their own media-specific offerings dedicated to different distribution platforms. In the US, the adoption of ATSC 3.0 is incentivizing broadcasters to move their operations to the cloud, as many key features of NextGen TV require flexibility and agility.

With the streaming space getting more crowded, broadcasters are speeding up their move to OTT and Software-as-a-Service (SaaS) business models, spurred on by cloud computing. Accordingly, many broadcasters are investing in hosted, cloud-based OTT video platforms offering ready-made tools for uploading, managing, monetizing, and securing content. For example, Kaltura TV enables customers to boost engagement and interactivity with personalized multi-screen access to linear, VOD, time-shifted TV, and third-party content.

Sources: IABM

Content Monetization Tech Trends

Content Protection

OTT content delivery is more vulnerable to piracy threats, and the transition to OTT drives investment in content protection media technology. Live sports is very lucrative content that is moving to OTT, with streaming platforms starting to acquire sports rights. These two factors combined make the streaming space an attractive target for piracy of live (and non-live) content.

> According to the Motion Picture Association of America, pirated video generates upwards of 230 billion views yearly, with 80% of global online piracy due to illegal streaming services.

MediaTech suppliers are partnering to develop content protection solutions. An example of this is a recent partnership between Harmonic and NAGRA for developing a watermarking-as-a-service solution.

> ""
>
> *For the video segment, we're driving the rapid expansion of our streaming SaaS brand and customer base. We're further extending our streaming SaaS technology and service differentiation, particularly for live sports, and we're leveraging the traditional broadcast appliance business to profitably enable these transformations.*
>
> Patrick J. Harshman, Harmonic's President, CEO & Director, Q3 2022 earnings call

Sources: IABM, Company Company Filings

Content Distribution Tech Trends

Content Protection

As noted by DAZN regarding the extension of its partnership with Irdeto for multi-DRM services, the damaging effects of piracy range from reducing investment in sports to security risks for consumers.

> ""
>
> DAZN is committed to creating a global sports streaming service that delivers for fans and partners alike. To do that takes significant investment in acquiring rights and developing technology. **The damaging effects of piracy are clear – potentially reducing investment for sports at all levels, exposing fans to privacy and security risks, and funding organized crime.** Working with Irdeto, DAZN can more effectively tackle the pirates through enforcement and better use of technology, while educating fans of the risks of accessing pirated content
>
> Sandeep Tiku, Group CTO, DAZN

Sources: IABM, Company Press Release

Content Distribution Tech Trends
Content Protection

Blockchain is an emerging technology that is effective in preserving intellectual copyrights and can be used:

To guarantee copyright compliance of media assets by smart contracts or with a cryptocurrency-based digital copyright management system, in which content creators can deal with viewers directly, without any centralized authorities.

To track assets by content owners. For example, Blokur offers artists of such labels as Universal, Warner, and BMG music rights management platforms, through which they can be paid fairly when third parties use their songs. Flixxo, Treeti, and LiveTree have also launched content delivery platforms that provide content creators with real-time analytics based on blockchain transaction data.

Smart Contracts

Smart contracts represent a potential tool for enforcement (and automation) in rights management. Smart contracts automatically enforce the terms of a relationship through code stored on the blockchain without relying on third parties (like law enforcement agencies) to do so. In rights management, a content licensor can monitor its licenses via smart contracts that automatically enforce some of the contract terms, such as geographical exclusivity or termination dates. AdChain - launched by MetaX and the Data Marketing Association in 2017 - is an example of a blockchain-based rights management solution using an open protocol. This enables users to track who views a certain media asset and what actions they take after having viewed it.

Sources: IABM

Content Distribution Tech Trends
Linear Signal Distribution - Terrestrial (DTT) & Pay-TV

The convergence of linear and digital is reflected not only in the "linearization" of the streaming space but also in the borrowing by traditional media businesses of some OTT features, such as interactivity, data analytics, and addressable advertising. HbbTV (Hybrid broadcast broadband TV) is an open standard for delivering advanced interactive TV features via hybrid broadband and broadcast networks to CTVs and set-top boxes. In many countries, broadcasters deliver targeted advertising on HbbTV-based connected TVs (i.e., Addressable TV) using the new DVB-TA (Targeted Advertising) standard. The latest HbbTV symposium's key topics included the involvement of HbbTV in the new DVB-I standard, which combines linear TV channels and streaming services in a unified channel list. Some media companies - like Digita in Finland - have adopted a model where they produce HbbTV platform services for other TV broadcasters.

FTA channels

Interactive services & data analytics

HbbTV standard

Addressable TV & complementary SVOD
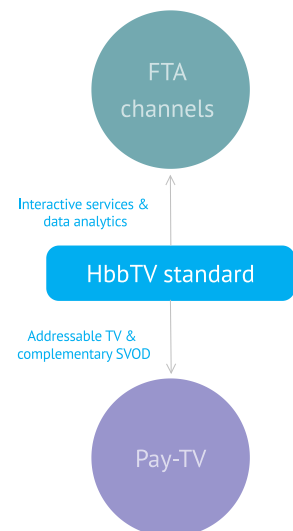
Pay-TV

Content Distribution Tech Trends

Linear Signal Distribution - Terrestrial (DTT) & Pay-TV

The advantage of HbbTV is that it can be used in different ways for FTA, Pay-TV, and online streaming. When used in FTA, HbbTV allows a broadcaster to deploy several engagement services, such as voting in live programs. A commercial broadcaster can use the same standard for adding interactive parts to linear advertising, get real-time data on ad campaigns, and complement their linear Pay-TV services with SVOD services by using a HbbTV service platform to create direct links from linear programming to SVOD.

> ❞
>
> *One important trend which surfaced at the Symposium is the engagement by industry players in various initiatives to better use and implement the HbbTV specifications and make the HbbTV ecosystem more practical and efficient, as HbbTV is now a true business enabler for many companies and not just an innovation area. The foundation of ATVI is the perfect illustration of that*
>
> Vincent Grivet, Chairman, HbbTV, November 2022

Content Distribution Tech Trends

Internet Distribution - CDNs

The pandemic-induced spike in daily traffic increased the demand for CDN services in 2020, with a decline in the following two years as streaming approached maturity.

Akamai revenue QoQ%

● Security ● Delivery ● Compute
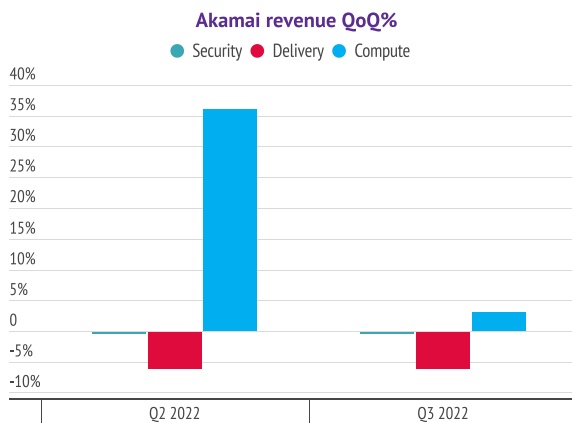
> ❞
>
> These results reflect continued deceleration in traffic growth among our largest customers and the impact of some large renewals that we completed in the first half of the year. As we said at our Analyst Day in May, we've aligned our pricing strategy with the slower traffic growth rates we've experienced this year.
>
> F. Thompson Leighton, Akamai, November 2022

Sources: IABM, Akamai

Content Distribution Tech Trends
Internet Distribution - CDNs

Convergence is burdening latency, as interactivity requires more data to be transferred. When combined with large-scale events, such as the Super Bowl, the effect is even greater due to many people streaming the live event and betting on it.

Super Bowl: Measured lag behind real-time for selected services

Sources: IABM, Akamai
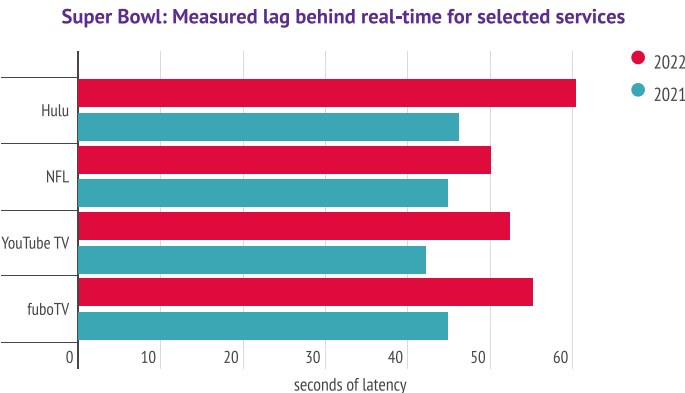
Content Distribution Tech Trends
Internet Distribution - CDNs

Recently, media technology investments in content delivery were largely focused on solutions to reduce latency in live streaming.

For example, Israeli operator Cellcom recently used Synamedia's Vivid workflow-as-a-service to reduce the previous latency of FIFA World Cup's streaming of up to 30 seconds to under 3 seconds from ingest to playout. At the start of the tournament, Synamedia supported streaming video on AWS. The solution included support for ABR, transcoding, origination, packaging, and content delivery using Amazon CloudFront CDN.

In January 2023, Ateme claimed that it managed to reduce latency to under 4 seconds in Cyprus.

In February 2023, Cellcom partnered with Viaccess-Orca and Broadpeak to achieve 3-second latency for live sports OTT delivery.

Sources: IABM, Akamai
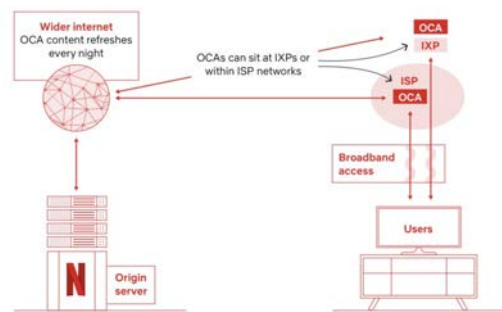
Content Distribution Tech Trends

Internet Distribution - AI in CDNs

Content delivery networks (CDNs) are playing a crucial role in the rise of OTT and thus increasingly becoming a focus of distributors of linear and non-linear content. AI/ML tools can predict usage and automatically scale resources up or down in a cloud-based CDN environment such as Amazon Cloudfront. This is useful for minimizing delay and better budgeting for costs. For example, Netflix uses AI/ML tools to optimize the performance of its CDN, Open Connect.

As the amount of high-quality content on VOD and OTT platforms continues to skyrocket, the routing decision(s) made by the CDN becomes very complex. In these circumstances, AI/ML can be used to make the routing decisions more efficient and intelligent by proactively identifying network traffic patterns and traffic demand (e.g., network bottlenecks) and then communicating them to the network operators.

To improve viewer engagement, media companies - mimicking gaming companies - are increasingly using digital feedback loops, communities and engagement platforms to improve viewer retention. Particularly, sports leagues and clubs have started to set up AI-enriched digital fan engagement platforms that combine physical and digital universes, making their first steps towards the metaverse.

Netflix's Open Connect CDN architecture

Sources: IABM, IBC365, Shyamal Madura Patabendige/ Twitter

Content Distribution Tech Trends

Internet Distribution - Blockchain-based CDNs

Blockchain enables decentralized content distribution instead of conventional centralized and distributed content delivery.

Centralized content delivery

The entire network is controlled by a single service (e.g., YouTube), leading to content censorship (moderation) and a lack of transparency.

Distributed content delivery

CDN spreads across the world through nodes however one entity has control over the entire network through the distributed nodes.

Decentralized (blockchain-based) content delivery

Blockchain helps to eliminate intermediaries in content distribution, with no single entity having control over the entire network.

Benefits of blockchain-based CDNs

With blockchain-based CDNs, content providers deliver content directly to their audiences without intermediaries, such as central servers, with no single entity controlling the content delivery network. This helps optimize storage space, reduce latency, and enable micro-distribution channels.

Storage optimization

Reducing latency

Enabling micro-distribution channels

Sources: IABM

Content Distribution Tech Trends
Internet Distribution - Blockchain-based CDNs

Storage optimization

Blockchain-based CDN enables optimizing content storage space by converting the collective unused space into a P2P cloud storage and data delivery system. With a P2P network, the probability of one stream splitting and getting scattered is higher because the replication rate of the video streaming 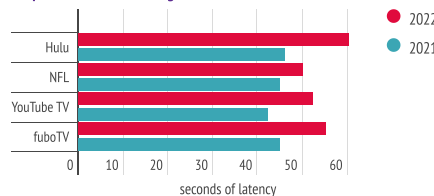is higher in P2P than in the client-server CDN structure. By leveraging blockchain to decentralize CDNs, content providers are spreading downtime risk across network nodes run by independent companies. Some media companies, such as Rewarded TV and Script.TV reward viewers in cryptocurrency for sharing their unused storage space.

Reducing latency

Media convergence is increasing latency as more viewers stream video content with interactivity features, resulting in larger data volumes transferred over the top. For example, this chart shows that latency increased at the recent Super Bowl due to more people streaming the event and betting on it. By eliminating intermediaries in delivering content to viewers, decentralized content delivery reduces latency.

Super Bowl: Measured lag behind real-time for selected services

- ● 2022
- ● 2021

Categories: Hulu, NFL, YouTube TV, fuboTV
X-axis: 0, 10, 20, 30, 40, 50, 60 — seconds of latency

Micro-distribution channels

Blockchain assists the creator economy by enabling micro-distribution channels.

Telcos are looking at leveraging blockchain to optimize resources, such as bandwidth, in an automated way through smart contracts as they launch their 5G networks .

Sources: IABM

Content Monetization Tech Trends
Advertising Systems

As broadcasters' TV ratings become volatile and their linear ad inventory smaller, advertisers are moving money to streaming.

TV networks are increasingly capping the amount of money going to a show's linear airing (i.e., linear TV inventory) to incentivize advertisers to redirect a bigger share of their ad budgets to the show's streaming distribution, leaving broadcasters room for last-minute – and more expensive – premium "scatter*" deals for linear ad inventory.
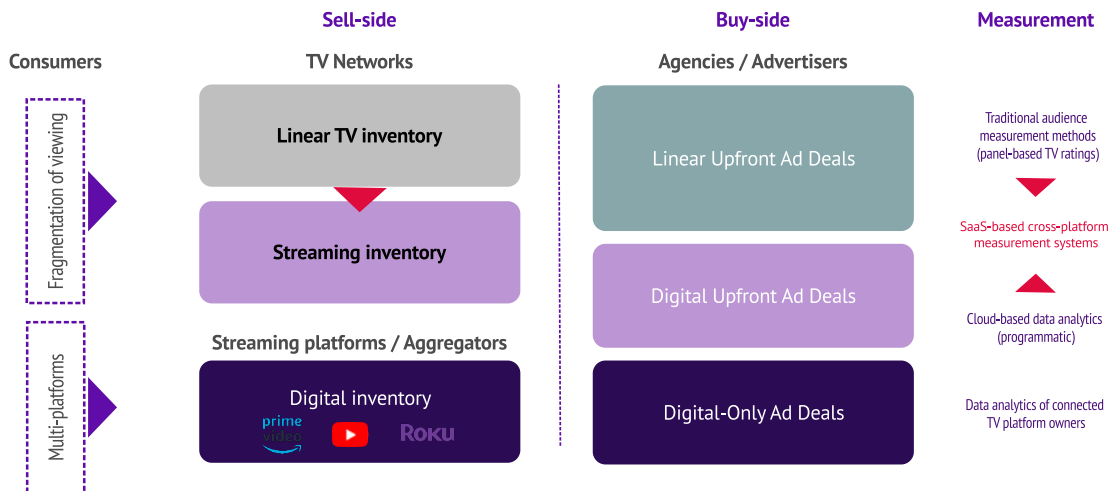
The coupling of linear and digital is shaping the future of advertising.

*"Scatter" market refers to air time, which is sold - at a higher price - closer to the actual programming date and which is not necessarily targeted to a particular demographic audience.   Sources: IABM, IBC365, Shyamal Madura Patabendige/ Twitter

Content Monetization Tech Trends

Advertising Systems - Diversification of video inventory

	Sell-side		Buy-side	Measurement
Consumers	TV Networks		Agencies / Advertisers	

Fragmentation of viewing

Multi-platforms

Linear TV inventory

Streaming inventory

Streaming platforms / Aggregators

Digital inventory
prime video   ▶YouTube   ROKU

Linear Upfront Ad Deals

Digital Upfront Ad Deals

Digital-Only Ad Deals

Traditional audience measurement methods (panel-based TV ratings)

SaaS-based cross-platform measurement systems

Cloud-based data analytics (programmatic)

Data analytics of connected TV platform owners

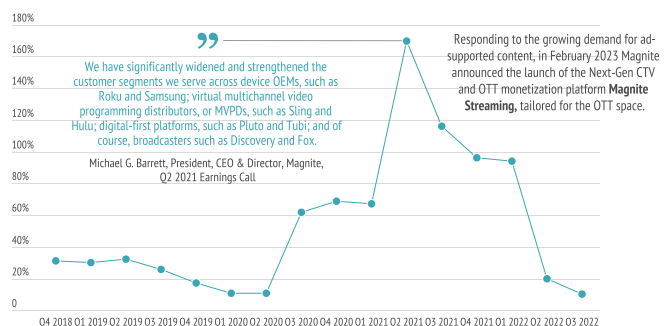Sources: IABM, IBC365, Shyamal Madura Patabendige/ Twitter

Content Monetization Tech Trends

Advertising Systems - Programmatic advertising

Programmatic advertising is actively deployed in digital ad buying, mainly focusing on streaming services and premium VOD sold across digital video channels and connected (smart) TVs.

Sell-side companies like Sky, Comcast, Hulu, RTL, and Channel 4 are investing in programmatic platforms and marketplaces designed for advertisers and agencies who can programmatically purchase video ads on their platforms. These platforms (e.g., NBCUniversal's One Platform) simplify and standardize the process of buying TV ad campaigns across different ad inventory pools.

Magnite's Quarterly Revenue YoY % growth

> We have significantly widened and strengthened the customer segments we serve across device OEMs, such as Roku and Samsung; virtual multichannel video programming distributors, or MVPDs, such as Sling and Hulu; digital-first platforms, such as Pluto and Tubi; and of course, broadcasters such as Discovery and Fox.
>
> Michael G. Barrett, President, CEO & Director, Magnite, Q2 2021 Earnings Call

Responding to the growing demand for ad-supported content, in February 2023 Magnite announced the launch of the Next-Gen CTV and OTT monetization platform **Magnite Streaming,** tailored for the OTT space.

180% 160% 140% 120% 100% 80% 60% 40% 20% 0

Q4 2018 Q1 2019 Q2 2019 Q3 2019 Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021 Q4 2021 Q1 2022 Q2 2022 Q3 2022

Magnite is the world's largest independent sell-side programmatic advertising platform that provides publishers technology to monetize their content across all screens and formats including CTV, online video, display, and audio.

Sources: IABM, Company Filings

Content Monetization Tech Trends
Advertising Systems - Programmatic advertising

Programmatic advertising is the fastest-growing segment in the digital advertising space, with a complex value chain and a lack of transparency on transactions. Blockchain technology can be particularly effective when combined with AI/ML for content monetization. For example, blockchain can capture identity-related data, while AI can assess the delivery paths and identify the most suitable ones to reach ad campaign goals. An example is AdLedger – a blockchain-backed peer-to-peer consortium formed by advertisers, publishers, and other related parties that uses blockchain to lock-up data with cryptographic keys, providing transparency and data security, thus facilitating a fairer programmatic advertising market.

Seeing their linear ad revenues declining, broadcasters are seeking new ad tech solutions to take advantage of the rapid growth of digital advertising globally. Some big media companies have already used blockchain as their ad tech strategy.

Comcast collaborates with NBC Universal, Channel 4, and Disney to match audience datasets without sharing data to improve planning, targeting, executing, and measuring advertising. Comcast's Blockchain Insights Platform, launched in 2018, was rebranded as Blockgraph in 2019. Blockgraph is a peer-to-peer ad tech platform for digital, broadcast, and streaming.

Viacom and Charter Communications (Spectrum Reach) recently joined the initiative. Using Blockgraph, the initiative's partners can share data more directly with each other while the data remains secured via encryption and blockchain protocols.

Sources: IABM, IBM Institute for Business Value, Ad Ledger

Content Monetization Tech Trends
Advertising Systems - SaaS-based cross-platform ad measurement

The diversification of ad inventory and the shift from upfront linear ad deals to streaming has made traditional audience measurement systems ineffective and revealed the lack of collaboration between sell-side and buy-side platforms.

Media companies - moving their operations to the cloud - are now investing in SaaS-based cross-platform measurement systems and developing marketplaces automating workflows and decisioning across the buy and sell sides of the market.

These platforms unify media companies' own user data with advertisers' datasets, improving the personalization and targeting of ads. By investing in cross-platform measurement systems, media companies can attract new advertisers who can improve their efficiency and cross-platform campaign management.

"

BVOD services are still works-in-progress, but we're making a lot of progress quickly. At ITV, we're building out our new marketplace to support programmatic trading and custom audience targeting, using both our own registered user data and advertisers' own datasets. We're creating a common TV identity solution and a marketplace for data to provide greater agility for both incumbent and prospective clients.
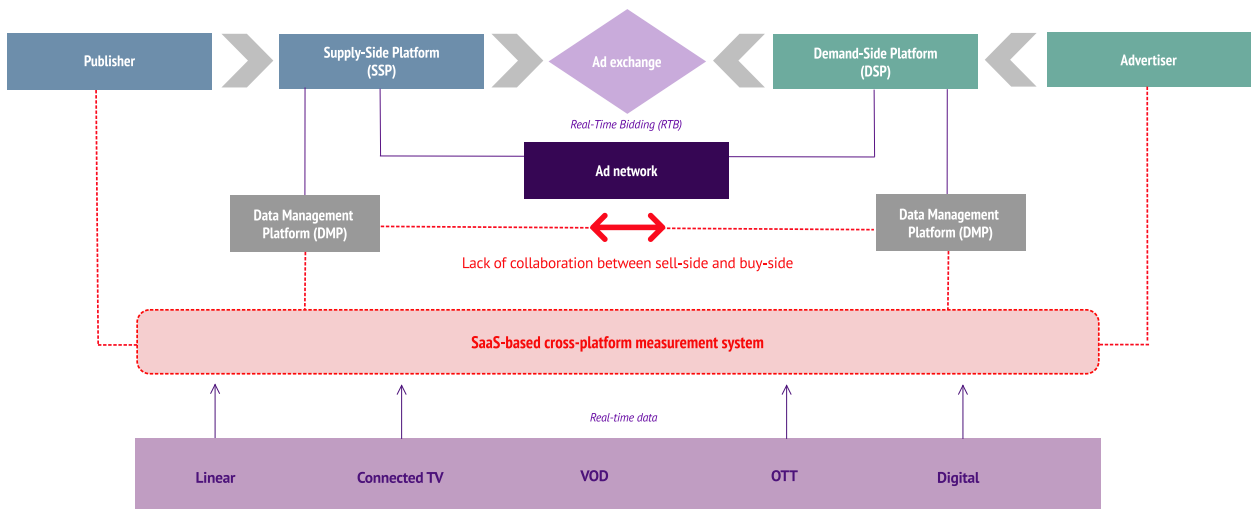
Rhys McLachlan, Director Of Advanced Advertising, ITV

Sources: IABM, ITV
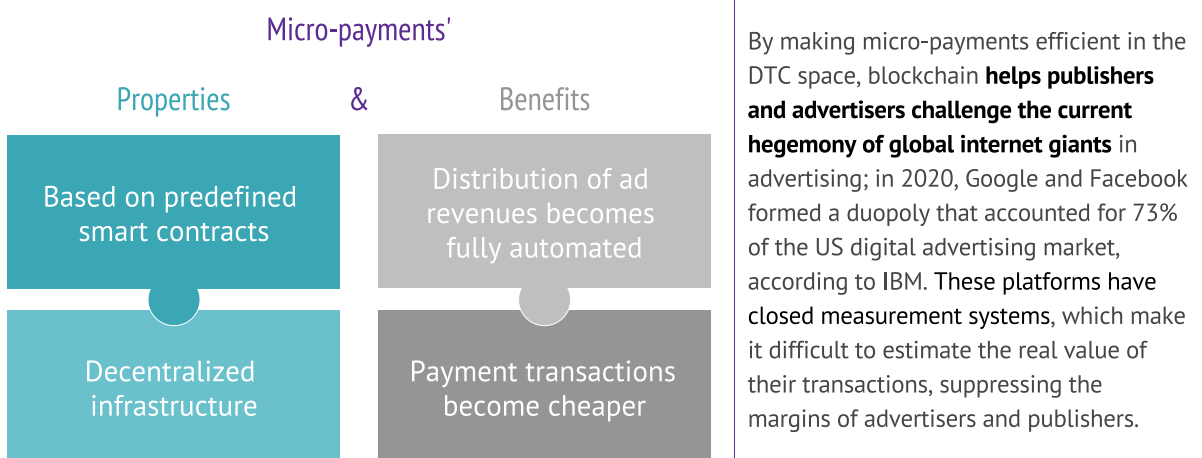
Content Monetization Tech Trends

Advertising Systems - SaaS-based cross-platform ad measurement

| Publisher | | Supply-Side Platform (SSP) | | Ad exchange | | Demand-Side Platform (DSP) | | Advertiser |

Real-Time Bidding (RTB)

Ad network

Data Management Platform (DMP)

Data Management Platform (DMP)

Lack of collaboration between sell-side and buy-side

SaaS-based cross-platform measurement system

Real-time data

| Linear | Connected TV | VOD | OTT | Digital |

Sources: IABM

Content Monetization Tech Trends

Micro-payments

Micro-payments'

Properties & Benefits

Based on predefined smart contracts

Distribution of ad revenues becomes fully automated

Decentralized infrastructure

Payment transactions become cheaper

By making micro-payments efficient in the DTC space, blockchain **helps publishers and advertisers challenge the current hegemony of global internet giants** in advertising; in 2020, Google and Facebook formed a duopoly that accounted for 73% of the US digital advertising market, according to IBM. These platforms have closed measurement systems, which make it difficult to estimate the real value of their transactions, suppressing the margins of advertisers and publishers.

Sources: IABM, IBM

Content Monetization Tech Trends

Micro-payments

Crypto payments enable smart contracts that automatically generate payments in real-time, eliminating the time spent managing these payments.

> In February 2022, Sling TV enabled crypto payments via BitPay – a crypto payments provider.

> Rewarded TV – an ad-free and subscription-free OTT platform launched by blockchain video tracking and payments platform Replay – rewards their viewers with crypto for watching content and engaging with it, for example, by sharing a particular piece of content or creating a playlist featuring certain movies. Viewers can also buy NFTs on the platform.

> Script.TV also rewards viewers with crypto for watching content. However, unlike Rewarded TV, it delivers content in a linear fashion, becoming a distributed, decentralized online base of content storage and playout, where content providers are paid based on how much their content is watched.

Sources: IABM, TV Technology

Content Consumption Tech Trends

User Experience

As the OTT market matures and competition grows, streaming platforms increasingly rely on better user engagement through improved user experience to reduce churn.

UI/UX becomes a key differentiator for streaming players in the highly competitive OTT space	
Content discoverability	Consumer identity management
Content discoverability is among the key priorities for consumers at a time of growing consumer churn at OTT platforms. According to the Nielsen Total Audience Report, 33% of consumers struggle with choosing content when they turn on their TVs. The same share of subscribers to streaming services expresses an interest in being able to manage and search for their available content from one place, according to another study conducted by Interpret, confirming Nielsen's results. According to the latter study, consumers expect bundled offerings to improve account management, discovery, and content recommendation functionality. The challenge of better personalization and content discoverability lies in the lack of metadata standardization and common recommendation algorithms. With an open standard of content metadata, recommendations across all platforms would align, resulting in better consumer retention.	Streaming aggregation adds complexity to consumer identity management across platforms, as content partners are reluctant to share consumer data with third parties, thus hindering progress in streaming aggregation.

Sources: IABM

CABLE FAULTLINES NEED REPAIR

A column on significant developments in the media world
By **ASHOK MANSUKHANI**

Advocate Bombay High Court.
Specialist in Multi Media Law and Regulation/Corporate Law and Regulation and Taxation.

The war between TRAI & LCO/MSO community needs to address the root cause of the imbroglio and come up with a suitable remedy.

A. MSO/BROADCASTER TARIFF WAR OPENS UP FAULT LINES IN CABLE INDUSTRY

◆ The **New Tariff Order:3** was issued on **22.11.2022**. It amended the **New Tariff Order:2**, published in **2020**, but it ran into a significant legal hurdle when Broadcasters filed a writ in the Bombay High Court, and the MSOs filed a writ in the Kerala High Court.

◆ The Broadcasters failed to get substantial relief from the Bombay High Court in 2021 and filed an appeal in the Supreme Court in 2021, which admitted the petition but refused to stay the Tariff Order. The MSOs did not get much relief, and **NTO:2** was partially implemented.

◆ In the **Explanatory Memorandum to NTO:3**, TRAI claimed that every consumer now gets **228 TV channels** instead of **100** earlier in a maximum **NCF** of **Rs. 130**.

◆ TRAI states further that when Broadcasters submitted their new **Reference Interconnect Offers**, it was noticed that they had priced most of their popular channels, including sports channels, beyond Rs. 19 and offered them on an *a la carte basis*.

◆ This led to representations from Distribution Platform Operators

(MSOS)/LCO Associations and Consumer Organisations. They pointed out various technical difficulties in SMS systems

and felt that the revised RIOs would raise consumer bills. They suggested a fresh Consultation for smooth implementation and consumer convenience.

◆ TRAI states it set up a Committee representing various service providers, which met in **December 2021**. The Committee gave numerous suggestions, leading to a new Consultation paper in **May 2022**. After an **Open House** discussion in **September 2022**, the **New Tariff Order** was issued in **November 2022**.

◆ In the New Tariff Order, after a complete analysis of rival contentions and data available with it, TRAI decided to return to the Rs. 19 regime as per **NTO:1**, stating that "*balancing the interests of service providers (Broadcasters and DPOs) and consumers, the Authority decided that a ceiling of Rs. 19 on the MRP of channels in a bouquet will be in order. This is expected*

to cause minimum hassles to the consumers."

- Further, TRAI prescribed a maximum discount of 45% on the sum of a la carte channels for arriving at bouquet prices.
- The issue of additional discounts to DPOs by Broadcasters will be dealt with by TRAI when the **Interconnection Regulations** are reviewed. This is pending.
- **All India Cable Federation (AIDCF)** filed a fresh writ in the **Kerala HC** against the revised **Tariff Order**. It failed to get an interim stay order, and the new **NTO:3** came into effect on **February 1, 2023**.
- While hearings have continued in the **Kerala HC**, the Broadcasters stepped up the pressure by issuing

48 hours' notice and resorting to mass disconnection of all members of **AIDCF** who had not signed new interconnection agreements with members of the **Indian Broadcasters and Digital Foundation**. Significantly Siticable broke rank and signed the new interconnection agreement.

- For the first time in many years, **AIDCF** targeted **TRAI** stating that it was in a 'tearing hurry' to implement **NTO:3** without having an idea of the price increase being hoisted on consumers. **AIDCF** alleged that once the "*increased rates are passed on to subscribers, the subscriber base will shrink in an irreversible manner causing grave damage to*

the cable sector, the consumers and the Petitioners."

- Even so, the **Kerala High Court** did not pass an interim order and decided to hear the various parties daily.
- Finally, on **February 24, 2023**, it appears signals were restored based on undisclosed discussions between IBDF and AICDF.
- At the hearing on February 24, 2023, the Kerala High Court gave one week's time to AIDCF to file a rejoinder to the IDBF Counter/ TRAI and fixed the next hearing date to March 3 2023.
- Curiously, even though signals were resumed on February 24, 2023, it did not make any difference to the continuation of the Court case.

COMMENT

- *This writer recalls that selective disconnections were standard arm-twisting tactics two decades ago when MSO/ Broadcaster contractual disputes were frequent. MSOs used to rush to the jurisdictional High Court for relief.*
- *Still, ultimately, the appointment of TRAI as the Broadcast and Cable Regulator in January 2004 led to a fairer Interconnection Regulation regime, with the Telecom Disputes Settlement and Appellate Tribunal often stepping in to provide quick relief to the DPOs/MSOs.*
- *Right from the first set of Interconnection Regulations issued in 2004, the ability of Broadcasters to switch off DPO signals at will came under many restrictions. Though all these Interconnection Regulations were fiercely fought in High Courts, Broadcasters ultimately fell in line, ensuring that mass disconnections were rarely resorted to until February 2023.*
- *So, what has gone wrong? This writer vividly remembers that when the new Digital Addressable Era dawned in April-June 2012, TRAI took the initiative along with MIB to set up implementation task forces which ultimately eased inter and intra-service provider tensions. India can take pride in being fully digital and addressable in cable services. This time there has been no initiative either by TRAI or MIB.*
- *Clearly, AIDCF (representing large MSOs) felt that the Regulator had given the Broadcasters an upper hand in NTO:3, and the concerns expressed by AIDCF had been ignored. Bitterly attacking TRAI must have led to a stiffening of TRAI's desire to get the NTO:3 quickly implemented, which is understandable. MIB's silence is intriguing.*
- *What is of deep concern to this writer is the large gap in the reaction of the Last Mile Operator, who directly supply cable signals to 98% of the 75-80 million cable base and the Multi System Operator.*
- *Perhaps AIDCF did not take its LMOs into confidence before going to Kerala High Court. A press release by the powerful Maharashtra Cable Operators Federation on February 23, 2023, accused MSO of "double standards", claiming MSOs "forced NTO:1" on the LMOs and turned PAT positive at the cost of LMOs whose revenue streams have dwindled.*
- *MCOF pointed out that DTH operators and Independent MSOs had already signed the NTO:3 new interconnection agreements, so why had AIDCF not followed suit? The Press Release tends to imply that the Kerala petition aimed to increase MSO revenues. At the same time, MCOF claimed, LMOs and Consumers were being "used as pawns".*
- *So, the fault lines in the Cable Industry, which had been gradually smoothened, are again out in the open. This can only delight Broadcasters and powerful DTH operators.*
- *Some observers claim that the current battle is a proxy between Star Disney on behalf of Broadcasters and Reliance Cable on behalf of MSOs. This writer finds such claims outlandish, at least for the time being.*

- *This writer has often pointed out the galloping rise of OTT platforms and the rise of Free Dish. Both are flourishing and will take away large chunks of the legacy market. The latest paid OTT base is estimated at 130.20 million as per Ormax Media, and Free Dish viewers have jumped to 45 million.*
- *So far, cord-cutting has been less than 5 per cent. This will increase unless wars with Broadcasters end and peace with Last Mile Operators is achieved. Let's hope for better times.*
- ***To conclude, Cable Industry must close ranks and solve its internal contradictions.***

B. ZEE/SONY MERGER GETS FRESH SETBACK/SITICABLE ADMITTED TO INSOLVENCY

ZEE INSOLVENCY

- The **Zee/Sony** merger process started in late **2021**, whereby on completion of all approvals, **Sony** will own a **50.86%** stake in the merged entity, while the promoters of **Zee** will own a **03.99%** stake. Public shareholders in **Zee** will hold the remaining **45.15%** of the merged company.
- By early **February 2023**, the proposed merger was approved by SEBI/Stock Exchanges, the Competition Commission of India and other government authorities.
- Some creditor challenges were pending in the National Company Law Tribunal in Mumbai, which was not taken too seriously because **Zee** lawyers had been arguing in the Tribunal that all pending liabilities would be paid off by the merged company, which, in combined form, would have sufficient liquidity.

- So, when the NCLT passed an order on **February 22 2023**, in favour of Indusind Bank appointing an Interim Resolution Professional, the news shocked the entire industry and the stock exchanges. The amount due to Indusind Bank is around **Rs. 92 crores**. That is not such a large sum which cannot be paid off.

- **Zee MD Mr Punit Goenka** immediately filed an appeal to the National Company Appellate Tribunal, which, by a short order on **February 24 2023**, stayed the NCLT Order appointing an Interim Resolution Professional and fixed **March 29 2023**, to hear the counsel for Indusind Bank. The Court directed that "*List for final disposal on March 29, 2023. Till that date, the order dated February 22 is stayed*".

COMMENT

- *It is surprising that Zee, which needs the merger with Sony to survive, took the long pending NCLT creditor petitions lightly.*
- *The final order allowing the merger is listed for hearing in the Mumbai Bench of NCLT on March 9, 2023. This will most likely be postponed until the NCLAT hears the Zee appeal on March 29, 2023.*
- *All these legal complications will undoubtedly delay the merger process by three to six months. While Zee Telefilms' merger with Sony is expected to create a powerful competitor to Disney Star.*

SITI CABLE LIQUIDATION

◆ The focus of industry and analysts has always been on Zee. The woes of **Siticable** have relatively gone unnoticed. Siticable is a pioneer MSO set up in June 1994 with **7.65 million** subscribers. It has steadily gone downhill; The

listed share price fell to **Rs. 1.25** on **February 24, 2023**.

◆ The NCLT also passed a similar order against **Siticable** for outstanding dues of **Rs. 148.83 crores** to Indusind Bank. Here too, an Interim Resolution Professional has been appointed.

COMMENT

◆ *The insolvency of Siticable is a sad development for the MSO Industry, which is seeing difficult days. Many MSOs, despite favourable Tariff Orders and Interconnection Regulations in force from 2019, are not doing well. This is especially so for legacy MSOs who have not seized upon the broadband opportunity and have surrendered it to telecom companies like Jio and Airtel.*

◆ *Many of the 1748 licensed MSOs have not yet launched their services. Existing MSOs are losing ground to OTT/ Free Dish. It is no consolation that DTH, too, is losing ground.*

◆ ***One key opportunity lies in the estimated 100 million homes lacking organised TV service. If this figure is correct, MSOs must move out of their metropolitan comfort zone and capture ground in rural and semi-urban areas ensuring high-quality video and broadband services.***

C. CONVERGENCE IS IN THE AIR

◆ On **January 30, 2023**, **TRAI** issued a Consultation Paper, which deals with whether existing laws are adequate for the convergence of broadcasting and telecommunication services carriage.

  ❖ This Consultation has been launched, based on two references by the **Department of Telecommunications (DOT)** dated **20.10.21** and 12.08.2022, requesting TRAI to give recommendations on

  ❖ *Amending the **licensing regime** to enable the convergence of carriage of broadcasting and telecommunication services (2021) and*

  ❖ *Establish a **unified policy framework and spectrum management** regime for the carriage of broadcasting and telecommunication services. (2021)*

  ❖ ***Restructuring of legal,*** *licensing, and regulatory frameworks for reaping the benefits of the convergence of carriage of broadcasting and telecommunication services. (2022)*

  ❖ ***Revising regulatory regime*** *regarding DTH and Cable TV services holistically addressing all institutional, regulatory, and legal aspects. (2022).*

◆ Interestingly enough, the **Ministry of Information and Broadcasting** expressed disquiet with the amended **2022** reference by DOT to TRAI dated **04.10.2022**, stating:

  ❖ ***The convergence of technologies has already happened greatly*** *in the last decade. TRAI and the Ministry have successfully handled all the legal, policy and regulatory requirements arising from such changes.*

  ❖ ***Hence carriage policy and regulations for broadcasting*** *should remain with the Ministry of Information and Broadcasting.*

  ❖ ***Regulation of content requires different skill sets*** *of creative and artistic persons than that of technocrats or economists who can factor in the impact of content on sensibilities, morals, and society's value system. Hence*

content policy and regulation should also continue with MIB.

- ❖ **Allocation of broadcasting spectrum and realignment** *should continue to be dealt with by MIB.*
- ❖ **Shifting licensing functions** *to DOT will not serve any purpose but only disturb existing practices.*

- ◆ Despite such a strong comeback from MIB, the parent ministry for the Broadcasting and Cable Industry under **Allocation of Business Rules 1961**, TRAI has issued a detailed Consultation Paper, which is heavily weighted in favour of the **Telecom Service Providers**.
- ◆ The issues identified for Consultation are:
  - ❖ *Is there a need for a* **comprehensive/converged legal framework (separate Comprehensive Code) to deal with the convergence of carriage of broadcasting and telecommunication services?**
  - ❖ **What should be the suggested alternative licensing and administrative framework/ architecture/establishment** *that facilitates the orderly growth of the telecom and broadcasting sectors while handling challenges posed by convergence?*
  - ❖ **What steps must be taken to establish a unified policy framework and spectrum management regime for carriage broadcasting and telecommunication services?**
- ◆ Some interesting observations in the Consultation Paper clearly show TRAI's intentions. These include:
  - ❖ *Different ministries are regulating different aspects of online services. This impacts ease of business "as the Industry is not clear as to who will prepare policies, give permissions and who will decide the regulatory framework."*
  - ❖ *This "impacts innovation as the response time to exploit new technologies increases. Thus, an ambiguous regulatory environment will negatively impact the investment sentiment."*
  - ❖ *Many regulatory powers are with various ministries, making governance convergence all the more challenging.*
  - ❖ *"Key considerations for developing a single code/ Act may be by consolidating the laws governing the provision of communication services, development, establishment, operation and expansion of communication services, communication infrastructure and networks and management of communication resources and for matters connected or incidental thereto.*
  - ❖ *Having a fully converged regulator for the ICT sector, which includes the data privacy and cyber-security functions, would also help increase the confidence of the international investors and facilitate the faster rollout of the digital services in the country."*

COMMENT

- ◆ *Ironically, this entire Consultation Paper has been issued, ignoring the Draft Communication Commission of India Bill 2001. This Bill originated from the seminal Supreme Court decision in the Cricket Association of Bengal case of 1994, which held that airwaves are public property and not the preserve of either the private or government sector. An autonomous regulatory body best manages them the Supreme Court ruled.*
- ◆ *TRAI also refers to the Draft Telecommunication Bill 2022 released in September 2022, which, apart from overhauling telecom laws, plans to bring in sections to regulate OTT communication and broadcasting services regulation.*
- ◆ *Amazingly, TRAI appears to have departed from its neutral stance and seems to be only espousing the cause of DOT, which is going all out to make the MIB non-est. It is well aware of the deep concerns expressed by MIB.*
- ◆ *Indeed, when such a vast gulf appears between two ministries, both having vital functions to play in the digital economy, the PMO/Cabinet Secretariat should settle the dispute between DOT/MIB before further damage is done to the interests of the Broadcasting and Cable Sector.*
- ◆ *Of course, TRAI may be looking for a significant overhaul of its powers, but it is doubtful that DOT will give up its vast powers.*
- ◆ *Further developments will have to be carefully monitored in future columns by the broadcasting and cable industry.*

NETFLIX & DISNEY RENEW STRATEGIES FOR GROWTH AMIDST NEW MANAGEMENT TEAM

Disney & Netflix Fix New Strategies For Growth Amidst Management Restructuring At The Top

In one of the most dramatic reversals in corporate history, the Walt Disney Co. board reinstated Bob Iger as CEO in November, ousting his predecessor Bob Chapek.

The change at the top of one of America's most beloved companies and the challenges that lie ahead for Iger in what was announced to be a two-year tenure, from finding a new successor to fixing Disney's streaming business and repairing the company's relationships with Hollywood.

Bob Iger's top priorities is to make the company's streaming business profitable.

Iger is responsible for Disney's all-in embrace of streaming, and the launch of its marquee service, Disney+, but he acknowledged the measurement of success has changed. Wall Street investors now focus on profitability, not merely subscriber gains. "Instead of chasing (subscribers) with aggressive marketing and aggressive spend on content, we have to start chasing profitability," Iger told a

BOB IGER

town-hall meeting on the company's Burbank, California, lot, according to a transcript of remarks seen by Reuters.

"In order to achieve that, we have to take a very, very hard look at our cost structure across our businesses." Disney joins a number of media companies seeking to grow their streaming services without sacrificing its film or television businesses.

There have been constant rumours floating of Disney being acquired or a merger with Apple. While rumours do turn out to be true often, a merger with Apple doesn't seems to be on the cards for Disney. In his first town hall meeting since retaking power, the Disney CEO reportedly addressed rumors that Apple and Disney might reach a merger agreement.

Iger rejected the rumours as he called any talk of Apple buying the company "pure speculation" for now.

GREG PETERS
Co-CEO

REED HASTINGS
Executive Chairman

TED SARANDOS
Co-CEO

Meanwhile Netflix's founder and its chief executive for 25 years, Reed Hastings, has stepped down from his co-CEO role to serve instead as the executive chairman.

Current co-CEO Ted Sarandos will continue to lead the streaming giant, and he'll be joined by new co-CEO Greg Peters, who has been Netflix's chief operating officer for three years and chief product officer for six.

The succession was announced Thursday as Netflix reported better-than-expected growth in the fourth quarter, capping a turbulent year that earlier included the launch of advertising, the company's first subscriber losses in a decade and the promise of a crackdown on password sharing.

Netflix, the world's dominant streaming-video subscription service, said members increased by 7.66 million, to 230.75 million total,

between October and December 2022.That beat Netflix's October's guidance to add 4.5 million new members. It also beats analysts'

average expectation, which was slightly more optimistic at 4.57 million new members, according to Refinitiv. The latest growth is a rebound from the first half of last year, when Netflix recorded unprecedented subscriber losses.

Before this year, Netflix's unflagging subscriber growth pushed nearly all of Hollywood's major media companies to embrace streaming as the future of TV. As they poured billions of dollars into their own streaming operations, the so-called streaming wars brought about a wave of new services, including Apple TV Plus, Disney Plus, HBO Max, Peacock and Paramount Plus.

5G IMPACT ON THE STREAMING INDUSTRY

5G technology has taken the world by storm, and its impact is being felt across industries. This cutting-edge technology offers a range of benefits that are changing the way we interact with the digital world.

Faster speeds and greater efficiency in mobile connectivity are both inevitable effects of 5G's influence, however, its reach goes far beyond cellular networks. Its presence in the video streaming industry brings new and highly competitive advantages for the sector.

Since its appearance in 2019, its everlasting evolution sets the bar high for the following 5G challenges. According to experts, the trends expected to flourish are:

Stand-alone 5G: The first major update to 5G networks, an architecture that fully utilizes the capabilities of the most recent cellular technology.

High revenue: Juniper Research predicts that 5G service revenues will reach 315 billion US dollars by 2023.

Artificial intelligence: An integration meant to cut costs, improve performance and create new revenue streams.

IoT: With 5G technology, the horizon opens up with valuable insights and better processes to drive development.

Cybersecurity: Network security through integration, protection, encryption and mutual verification procedure of all data traffic.

The arrival of 5G technology has transformed video streaming services, enabling the delivery of high-quality content in real-time with faster connection speeds and reduced latency.

Elements needed for an uninterrupted visual experience to increase viewer retention are a combination of factors that include superior resolution such as 4K and 8K, uninterrupted streaming without buffering or loading issues, and a visually appealing interface.

With the appearance of these conditions, a new context arises, one in which it will be easier for streaming services to enter the market, leading to more competition for established streaming services such as Netflix, Amazon Prime Video, and Hulu. Streaming services may need to differentiate themselves by offering unique content, features, or pricing to stay competitive in a more crowded market. Consumers will benefit from more options and competitive pricing as streaming services battle for their businesses.

With 5G, mobile devices have it easier to stream video content on the go. Live video streaming is another feature that stands out. By improving quality and stability, users can now watch live events without buffering or lag problems, paving the way for broadcasters and content creators to reach larger audiences offering more engaging content.

Additionally, this technology has the potential to drive the adoption of advanced streaming possibilities, creating new worlds such as virtual and augmented realities. With its support, users will be able to experience their content in real time, opening brand new doors to the way we learn, entertain ourselves and advertise products.

According to technology research platform Technavio, the metaverse related to entertainment is projected to grow to almost USD 29 billion by 2026, highlighting a whole range of brand new business opportunities in the coming years.

The introduction of the 5G disruptive power has unlocked new opportunities in the B2B technological race: streaming quality, increased competition, and enhanced mobile streaming are just a few of the ways that 5G is shaping the sector. As 5G networks continue to roll out and become more widespread, we can expect to see new streaming services and platforms, as well as a more immersive streaming experience for consumers.

UPCOMING STRATEGIES OF KEY PLAYERS IN THE STREAMING MARKET

The streaming industry is growing faster and faster, becoming the most popular way of enjoying entertainment. Well-known platforms, such as Netflix and Disney+, have added features like live sports, original shows, and advertisements, making 2022 an important year for streaming services. In order to stay competitive, they must keep improving their offers for user growth.

The current situation is pushing operators to build a more advanced infrastructure that can handle the steadily increasing demands of streaming. IP video streaming is not enough; the process has become more complex, with components that need to be adjusted precisely. This is why video is playing a major role in current digital transformation opportunities. Examples of this can be seen in the HBO Max/Discovery+ combination, Netflix's password-sharing rules and the rise of ad-supported platforms.

Now, these players must take a more aggressive approach. Let's take a look at some of the different companies that are competing for a greater share of the streaming market.

J.P. Morgan analyst Doug Anmuth has estimated that Netflix's "Basic with Ads" plan will attract 7.5 million subscribers this year alone. The company is looking into new initiatives for the upcoming months, such as the launch of the "Extra Members" feature, an investment in cloud gaming to expand their library, and potential live streaming for unscripted shows and stand-up specials. Mike Verdu, Vice President of Games at Netflix, is exploring different options for members to have access on TVs and PCs.

Disney+ initiative in pursuit of reaching 230/260 million subscribers by 2024 involves soon-to-come price hikes on its plans together with the

weaving of a wider international coverage that will bring the total to around 160 countries by 2023.

In 2023, HBO Max and Discovery+ will join forces to create an all-in-one streaming service called "Max". This upcoming streaming platform has the potential to be a major player in the industry, as the combined subscriber count of the two services associated with it has already surpassed 94.9 million by the end of the third quarter of 2022.

Among the ideas to be developed, WBD (Warner Bros. Discovery) is expected to dedicate its time to planning a free ad-supported streaming (FAST) service and pulling over HBO originals as its streaming strategy.

Hulu's ownership is currently under discussion. A potential Disney/Comcast negotiation plan could begin earlier than originally planned in 2024. Bob Chapek, Disney's CEO, has expressed an eagerness to combine the two companies sooner rather than later.

It appears Amazon is again focusing its attention on expanding its content and live sporting events, and reaching a potential agreement with Warner Bros. to offer DC-based animated shows on Prime Video. Rumors also suggest the platform could be taking a risk by launching theatrical films, requiring a significant amount of financial input.

As the market continues to expand, with a projected growth rate of USD 1,690.35 billion by 2029, businesses must remain creative and adaptive in order to stay ahead of the competition and secure user base growth. Engaging in innovative strategies and responding to customer needs are essential elements of long term success in the market. Companies should be constantly researching and developing new ways to meet customer demands, or risk being left behind in the race for customer acquisition.

BODHITREE TO SCALE UP ITS INVESTMENT IN POST-PRODUCTION INFRASTRUCTURE WITH RS 500 CRORE INVESTMENT

MAUTIK TOLIA

Bodhitree Multimedia Ltd, the content production house known for Netflix original Class, is looking to open a media and entertainment (M&E) hub in Thane near Mumbai, at an investment of ₹500 crore in the first of two phases.

This facility will include shooting floors, post-production infrastructure, skill development institutes and opportunities for tourism in the growing M&E market in the country.

"With the boom in media and entertainment in the country, especially since the advent of OTT platforms, there has been a huge infrastructural challenge to carrying out high-end shoots in Mumbai. To produce cutting-edge content, there is a need for both physical and human infrastructure," Mautik Tolia, director, Bodhitree Multimedia Ltd .

The project, known as Dharamveer Media City, will have four components, Tolia said. First will be shooting locations including those for underwater sequences; second post-production facilities to cater to both local producers and global studios; third, skill development institutes for workers in the hair, make-up, light, art and other such departments; and fourth will be opportunities for tourism.

The investment will be made phases, with about ₹500 crore in the first phase to be brought in by a subsidiary of Bodhitree Multimedia. Tolia expects the project to become operational at 30% capacity within a year.

Tolia said several producers currently prefer to import equipment or go abroad to shoot if facilities aren't available in India. "A lot of older studios are also shutting down so there is a need to develop the next lot of facilities," he said.

In February 2022, James Murdoch and Uday Shankar had announced the launch of Bodhi Tree as an investment platform which is financially supported by the Qatar Investment Authority who has committed $1.5 billion to it. Qatar Investment Authority (QIA) is the sovereign wealth fund of the State of Qatar.

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