Re-imagine the future of media production

How will the trends of today help content communities push boundaries tomorrow?
The abundance of technology trends impacting the media and broadcast industry continues to grow every day. For CTOs and CIOs it’s vital to make the right strategy changes at the right pace; on the ‘business’ side the pressure is on to predict ROI around developing (and sometimes unproven) technology models, while also avoiding slow decision-making which risks missing out on game-changing opportunities.

In my conversations with customers I often come across questions like: Will VR be the new 3D? How can we get on the front foot as information security rises up the boardroom agenda? Should we be investing in HD HDR rather than 4K? Is 360 degree shooting a new frontier for engaging online viewers, or merely a fad? And these customers are only going to find themselves with more questions over the coming years, yet relatively few black-and-white answers.

We recognise that the key influencing factor in this shifting environment is cost, and how risks in new technology investments can be absolutely minimised. That’s why we believe that early planning and close conversation between manufacturers and customers is pivotal in charting a course through the changing technology landscape, and finding the right fit with the technology opportunities at play.

While there are hundreds of technology trends generating debate among the media community, we’ve tried to focus this paper on the specific areas that we see as having a clear and transformational impact on media production over the next five years. We’ve based this on our conversations with customers, analyst houses and industry bodies, as well as the (lively!) debates taking place between experts within our business.

Over the next few pages you’ll see Sony’s point of view on how the trends we’ve selected will change the production landscape. As well as what you need to start thinking about now to make sure you’re ready to take advantage of the benefits in the future.

It’s not been easy to narrow down these trends and we welcome your feedback on our views and the areas that will impact you most. We look forward to hearing your thoughts.

Michael Harrit, Head of Marketing Media Solutions
The focus areas Sony believes will have the most impact on Media Production in the next five years.

Cloud
A combined on-premise and cloud model will become the norm
From ‘product’ to ‘product and PAYG service’ models
Storage-free-enabled cameras will drive efficient workflows

Connectivity
Will 5G mark the end of the DSNG van?
Every journalist will be a mobile journalist, as will every consumer
Taking good care of your equipment will pay-off
Software SIMS open up the market for camera and connectivity bundles

Big data
Today’s Head of Production is tomorrow’s Chief Production Data Officer
Data-optimised workflows will be totally bottleneck free
The future of targeted advertising is metadata driven
Less wasted, more targeted content

Convergence
The rise of Software-Defined Automation
Truly ‘pick and pay’ remote resources

Conclusion
Collaborating to bring about change
As the industry places more trust in cloud technology its increasing use will result in greater efficiencies, more creativity, and new, innovative business models.

Worldwide spending on public cloud services will grow at a 19.4% compound annual growth rate (CAGR) from nearly $70B in 2015 to more than $141B in 2019.

Statista: Public cloud infrastructure as a Service (IaaS) hardware and software spending from 2015 to 2026.
A combined on-premise and cloud model will become the norm

Although some businesses will move faster than others, communication, content, and workflow will all eventually move to the cloud. As a result workflows will change from linear and manual to collaborative and part-automated, as teams become increasingly able to work efficiently on files live and in real-time, and seamlessly moving back-and-forth between the cloud and on-premise.

WHAT NOW?

Start thinking about your cloud strategy now. We know that information security is at the top of your agenda so try a pilot with a platform like Sony Ci that moves communication to the cloud for a particular team or project, allowing you to test security and demonstrate the efficiency benefits to the wider business. When you’re confident that you have a model that works expand from there.

“...a shift towards hybrid models: These models incorporate some public cloud services, while keeping more sensitive data in private clouds, and increasingly use encryption and anonymisation of data in public clouds.”

Accenture: How cloud computing changes the game in media and entertainment report

By 2019, more than 86% of workloads will be processed by cloud data centers

Cisco: Global Cloud Index 2014–2019
From ‘product’ to ‘product and PAYG service’ models

Hardware from cameras to switchers will capture more and more usage data and deliver it back to vendors, dealers and rental houses via the cloud. These companies will change their price models to offer additional pay-as-you-go services.

WHAT NOW?

Having to work with less suppliers will streamline your operations. At this early stage there’s the opportunity to shape your hardware vendors’ thinking. So start talking to them now about the kind of services and hardware/software packages would be beneficial to you.
Cloud Storage-free-enabled cameras will drive efficient workflows

Camcorders will be built with the option for no on-board memory, and the capability for content to be stored directly into the cloud. This will remove the storage limits facing journalists and cameramen, giving them more efficient workflows with collaborative editing.

WHAT NOW?
Start thinking now about how storage-free-enabled cameras could make your workflows more efficient and what that might mean for your business. Wireless shooting could remove the creative shackles facing cameramen, as it has with the team behind the Locarno Film Festival. The ability to be more collaborative will change the way your editing team work together - so what does that mean for your future hiring strategy?

"With increasing multi-screen viewing of both recorded and live events, broadcasters have to modify their legacy infrastructure to suit the dynamic and agile needs of operations. In addition, there is ongoing pressure to reduce the CAPEX and shift to OPEX based services."

Mukul Krishna, Global Director - Digital Media, Frost & Sullivan

Globally, consumer cloud storage traffic per user will be 1.6 Gigabytes per month by 2019, compared to 992 megabytes per month in 2014.

Cisco: Global Cloud Index 2014-2019
Connectivity

Widespread 4G, the introduction of 5G and standardised IP connectivity will become common for both non-live and live content. This will increase flexibility and drive efficiencies within production, opening up the possibilities for more innovative and niche content.

European M2M Connections are predicted to reach 500 million by 2020; 3.1 billion globally.

Frost & Sullivan
CONNECTIVITY

Every journalist will be a mobile journalist, as will every consumer

Better connectivity will transform news production, increasing the amount of user-generated content and accelerating the growth of field journalism. No longer worrying about technology or processes will mean mobile journalists can fully focus on the quality of their content.

WHAT NOW?

As user-generated content becomes even more widely used within news production newscasters need to plan a strategy for identifying the best content available. But once they’ve found the right content, they also need to think about ensuring a quick process for obtaining the right permissions to use it. Consult your legal teams now so you have a plan in place for the future.

“Broadcasters and publishers are capitalising on the smartphone revolution when it comes to sourcing content, and the growing phenomenon of eyewitness smartphone footage is allowing them to cover events like never before.”

Bevan Thomas, Newsflare
Will 5G mark the end of the DSNG van?

Mobile journalists will be able to cover live events that are only possible with DSNG vans today, increasing coverage of more niche events, from ice hockey to jazz concerts.

WHAT NOW?
The question is what events to cover? Invest in audience research to identify what sports and other events are showing an increase in popularity and consider covering one-off events now to test audience reactions that will help you make plans for the future.

76% of media companies believe 5G will be a real game changer, enabling compelling new offerings.

Ericsson: Opportunities in 5G report 2016
Taking good care of your equipment will pay-off

Better device tracking will change remote support and insurance models, reducing costs for those that take good care of their equipment.

WHAT NOW?
This a great opportunity to make cost savings. But educating staff to ensure they understand how equipment needs to be looked after will be key in being able to take advantage of that opportunity.

The number of Internet of Things connected devices will reach 38.5 billion in 2020, up from 13.4 billion in 2015.

Software SIMS open up the market for camera and connectivity bundles

The introduction of the software SIM will change the role of camera manufacturers, who’ll be able to offer a bundled camera and connectivity package that auto-finds the best network on the same pricing model, supporting roaming journalists with low-cost connectivity.

WHAT NOW?

With greater freedom comes more choice. Roaming journalists can’t cover everything so processes for making decisions about which coverage to prioritise will need to be clearly defined between journalists and their remote production teams.

6.4 billion connected things will be in use worldwide in 2016, and will reach 20.8 billion by 2020.

Gartner, Inc. prediction 2015.
Big Data

Across the production chain, focus will move from ‘asset’ to ‘insight’. Technology-literate teams will combine and analyse data to make better choices, key to staying ahead of the competition.

About 328.8 Million hours of content were viewed globally in 2015 and this will likely grow to 506.9 million by 2020.

Frost & Sullivan
BIG DATA

Today’s Head of Production is tomorrow’s Chief Production Data Officer

As focus shifts to making data-driven decisions on budgets, broadcasters will prioritise hiring employees who combine data science backgrounds with an understanding of media production. These data experts will work closely with production teams to translate insight into better editorial choices.

WHAT NOW?

This shift will happen over time but HR teams looking to hire new production staff now should begin to look for data science expertise to make sure teams have the skills to support the Chief Data Production Officer of tomorrow.

“We are moving from an era of mass audience reach to mass viewer personalisation and this will require much greater use and understanding of data science.”

Steve Plunkett, Ericsson

43% of companies report their lack of appropriate analytical skills as a key challenge.

BIG DATA

Data-optimised workflows will be totally bottleneck free

Optimising time to air will become simpler, as data captured across the production process will help identify workflow bottlenecks that can be fixed for more streamlined workflows.

WHAT NOW?

Having the right people to analyse this data will ensure bottlenecks can be accurately identified and fixed. Broadcasters looking to hire new staff should look for data science expertise, or identify vendors that can support them in both collecting and analysing this data.

“Software is giving superpowers to editors, marketers and advertisers, combining human creativity with the speed of machine learning and delivering this power through the universal reach of the internet.”

Pancrazio Auteri, ContentWise

More than three-quarters of companies are investing or planning to invest in big data in the next two years, a three percent increase over 2014.

Gartner, Inc. research 2015.
The future of targeted advertising is metadata-driven

A greater breadth of metadata will be captured at acquisition and automatically processed for broadcasters’ commercial SEO teams, who will use it to find new ways of making web content appear higher in search rankings, increasing personalised advertising opportunities.

WHAT NOW?
Supporting your SEO teams in using this data effectively is all about starting to make the case for the right tools and processes now. If the business is aware of the commercial opportunity that could come from using metadata in this way, they will be more likely to add it to their investment plans in the next few years.

“Advertising technology continues to evolve for us, so delivering levels of interactivity around video advertising on personal devices is one big thing: being able to extend ads, click into web sites or click to buy.”

Jonathan Lewis, Channel 4

Over half of people favour seeing more personalised or relevant ads online.

IAB study 2015.
BIG DATA

Less wasted, more targeted content

Data analysis will drive greater qualification of what’s planned through to what’s released, meaning there will be less wasted commissioned content. All programming will be highly targeted, creating personalised schedules with no ‘filler’ required.

WHAT NOW?

With OTT content providers moving ahead with more personalised content based on audience data now, follow them closely and see what you can learn from them. Thinking about what sources of data you already have, and where there are gaps, will also be key to working out a strategy for moving to a more data-driven model in the future.

38% of website visitors are willing to specify their individual interests so that a site can personalise content.

Convergence

With budgets continuing to be tight the convergence between IT and broadcast will only continue, driving greater efficiencies and flexibility for broadcasters that opens up new creative possibilities.

IT spending for the Media Industry in Europe is likely to rise to $73 Billion by 2020.

Frost & Sullivan
The rise of Software-Defined Automation

Software-Defined Everything will become widespread, increasing automation across workflows, as rules are created by senior IT architects and decisions are learnt and replicated. This will open the door to greater flexibility and abstraction.

WHAT NOW?

IT teams should start plotting out now where Software-Defined solutions could benefit them across the business. Automation will become most effective where these solutions are used across workflows. But starting with a pilot in a particular area, for example Software-Defined Storage, will allow you to learn what works well before you expand to other areas.

In 2016, average spending on software-defined infrastructure is projected to increase by 14.4 percent, with 67 percent of enterprises reporting increases.

451 Research: Software-Defined Infrastructure Q4 2015 report.
CONVERGENCE

Truly ‘pick and pay’ remote resources

IP connectivity and virtualisation will enable producers to pick and pay for geographically-spread resources - both people and technology - that they can ‘turn on and off’ for any given project. Auction style job markets will spring up so broadcasters can bid for the right freelancers to work on specific parts of projects where their skills are required, with no wasted resources.

WHAT NOW?

For this to come to fruition IP standardisation needs to be in place. While work is already underway in this area, driven by groups like the IP Live Alliance, we’d recommend proactively speaking to both vendors and industry bodies about your requirements. We’re actively working on IP standardisation and helping ease the transition to IP, with initiatives like our dedicated training with Juniper, and would be happy to discuss your needs.

41% of respondents said they had actually already begun the transition to using IP in live production in nominated workflows, and just 7% said they had no plans for transition.

Futuresource Consulting research on behalf of Nevion: IP in live production - the future is now.
In conclusion: collaborating to bring about change

This is just a small snapshot of how today’s innovations will help content creators push boundaries tomorrow. What is clear is that the vision of how these trends will impact production will not be realised if individual businesses work in isolation. Industry collaboration between broadcasters, production companies and competing vendors will be key.

At Sony we are focused on collaborating in three key areas: Image, IP and Workflow. We believe that it all starts with the image, everything will be connected by IP and that will ultimately transform media workflows. We want to work with you to support transformation in these three key areas. Contact your account manager to find out more about how we can partner to re-imagine what is possible across media production.

pro.sony.eu/imageipworkflow