dpp®

MAKING
THE NEWS

Foreword

Questions are sometimes asked about what constitutes news. And the answers are many and varied.

For some, news is about the grand issues of the day, the world of politics. For others, sport is their key news dynamic, as important to them as any debate in any parliament. For many, the weather is always top of their agenda, particularly in these days of climate concern. And then there is the realm of entertainment and celebrity, what some may regard as idle gossip, but for a constituent of the population, a critical part of their day-to-day conversation.

Our industry cannot dictate the news tastes of the day, these will always be developing and changing. While there's no universal answer for what constitutes the news, we are increasingly being asked "where is the news?".

The news always used to be in newsprint, or on radio, or on TV. And it still is, but it is also now on a website on a laptop, on an app on a smartphone, on a social media site, being shared in a chat group. News is everywhere, even where people do not necessarily recognise they are actually consuming news. And in order to deliver that news, news teams need to be everywhere too, not just gathering, but also delivering the news regardless of their location.

This poses challenges for news organisations around how they are organised, the technologies they deploy and the workflows they implement. They need to continually adapt to these seismic shifts which kicked off over the past decade and show no sign of abating.

Avid's approach is to continue to drive new solutions to meet these needs; to enable remote workflows and support distributed teams delivering from anywhere to any consumer platform with collaborative tools on mobile, on the web and in the office.

The work of the DPP continues to inform the industry on the key trends. We look forward to helping our customers meet the challenges of today and tomorrow.

Making the News

Introduction

Newsrooms are changing faster than ever before. They're creating new types of content to engage audiences on different platforms, and implementing new business models in an increasingly competitive market for audience attention.

Clichéd though it is to say, the need to 'do more with less' is a practical reality for many news providers. So the future newsroom must have technology and processes that can provide the speed, efficiency, and agility required to succeed.

> **More than other content types, news is experiencing disruption in formats and outputs**

News organisations are going through the same transitions as the wider media industry: the shift of viewers online, the transition from hardware to software, the move of infrastructure to the cloud. But perhaps more than any other content type, news is experiencing disruption in formats and outputs.

The editorial and commercial implications of this changing landscape are considered in *The News Business*. In this report, we examine the technology and workflow changes necessary to keep up.

> **" We're trying to remove the barriers to getting a story out "**

And 'keep up' is an appropriate phrase in a business where speed is of the essence. The outlet that breaks a story first wins the day, so very few things are as important as enabling journalists to do their work as fast as possible.

> **Everything we're doing is around speed; trying to remove the barriers to getting a story out. We are recording the number of steps it takes people to do certain things and the time it takes them. Speed is of the essence, if we can help in that area it has a wider impact on the business.**
>
> STEVE WILSON-BEALES, GLOBAL

While systems must enable editorial teams to be efficient in their process, they must also enable efficient use of resources to help reduce costs. *The News Business* declared that "there is a massive technology efficiency opportunity" in newsrooms.

Startup news providers are using new technologies to dramatically reduce crew numbers compared to incumbent broadcasters, while operations teams are harnessing consumer technology and IT systems to great effect.

> **If you look at the things that have sparked major change in broadcasting and digital publishing, they've all been where we've harnessed technologies from other places, whether it's the mobile phone or the internet. So we need to be focused on that, not just on improving what we do in the present.**
>
> SANDY MACINTYRE

"We can't just be focused on improving what we do at present"

The DPP has worked with 34 contributors to find out: what are the changes taking place in today's newsrooms? What developments are on the horizon? And is it possible to define a blueprint for the newsroom of the future?

Executive summary

1 Start with the story, not the output channel

News providers are adopting the story centric approach - as opposed to a workflow defined wholly on the output, often a TV broadcast. But a pragmatic approach is needed to focus on the story, while retaining editorial specialism.

2 IP transformed newsgathering; cloud production is next

Cellular bonding and smartphones revolutionised newsgathering. IP technology is now transforming the studio and moving live production to the cloud. But news organisations must not miss the opportunity to build on changes forced upon them by the pandemic.

3 Automation and metadata work hand in hand to improve efficiency

Metadata is the fuel for discoverability, monetisation, and automation in news workflows. Frictionless and automated metadata capture is one of the biggest opportunities to make journalists' lives easier, enabling them to do more.

4 There is a need for fresh focus on the journalist's experience

The user experience of news tools has been neglected, compared to other innovations in newsroom technology. This UX needs to improve to empower news and editorial staff to do their best work as quickly and easily as possible.

5 We all work in a connected ecosystem

News technology teams are frustrated by technology tools which do not connect easily with other technologies and services. Suppliers will have to engineer their products to be integrated to be part of future news operations.

6 Customer and supplier relations need to improve

The DPP uncovered tension between news organisations and their suppliers; more so than in other parts of the industry. But ultimately all parties want the same thing; to move on from some of the technologies of the past.

7 Change management starts from the top

The changes taking place in the newsroom are significant; impacting traditional roles and structures. Leadership and strategic vision from the highest echelons of news companies is required to design and deliver future news operations.

Contributors

The content for *Making the News* has been gathered through research, workshops and interviews with subject matter experts working across the news industry. Valuable input has also been provided by our Lead Sponsor Qvest, Expert Sponsors Avid, Dalet and Wolftech, and Contributing Sponsors 7Mountains and AP.

Although the content of this report has been informed by these discussions, it should not be assumed that every contributor shares all the views presented here. We are grateful to each individual for sharing their time and expertise with the DPP and their peers.

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1. The proliferation of publishing

KEY INSIGHTS

As more platforms and outlets have become part of news distribution, parallel teams and workflows have formed

There continues to be a need to differentiate journalistic style for different audiences, but media companies are now bringing together teams in the same spaces and systems

Agility is key: news providers must keep an eye on future consumer trends and adapt to the changing needs of their audience

The way news reaches audiences is fundamentally changing. As former Editorial Director of BBC News and co-founder of *The News Movement*, Kamal Ahmed, explained in *What's The News*:

"People aren't coming to destinations for the news, they're seeing the news in their feeds. So we're no longer competing with each other, we're competing with anything you can do on your phone.

KAMAL AHMED, THE NEWS MOVEMENT

The much coveted 18-35 audience is very much mobile-first in its behaviour, with a huge surge in news audiences on platforms such as TikTok and Instagram. Yet linear television remains highly popular, and strongly trusted.

What is the best way to create and deliver content across multiple outputs?

This creates a dilemma for news teams that sits at the heart of how they design their workflows: what is the best way to create and deliver content to so many more outputs?

Over the last decade or more, broadcasters have built up digital teams and workflows in parallel to those of the linear news outputs. There is a heavy burden of legacy to be overcome, and a change management challenge to face.

> The workflows for linear and non-linear are still quite different. This is not a necessity in my view, but it's about legacy and people. We have different people in the linear and non-linear parts of the newsroom, and to bring that together needs work on a unified workflow that would think anew.
>
> ROBERT AMLUNG, ZDF

"The workflows for linear and non-linear are still quite different"

Many are working hard to create combined teams, to develop unified workflows, or to implement systems that enable news staff to publish to multiple outputs.

> It has to be a seamless workflow and not platform dependent. We need to have a workflow and ability to broadcast news across any platform.
>
> ADITI PANDEY, NRK

> Our biggest requirement was that everywhere we publish should be done from within our news production system.
>
> PETER ZANCHETTA, TV2 NORD

However, it is not simply a matter of publishing the same content to different endpoints. The workflow must allow for different editorial approaches to meet the needs of different audiences. And audience tastes and demands will continue to evolve.

> **You produce news differently for a linear channel than you do for digital.**
>
> LUCY O'BRIEN, EMG

It's not simply a matter of publishing the same content to different endpoints

As we'll see throughout this report, the need to unify and enable collaboration must be balanced with the need for expertise in each different editorial format.

In the *DPP 2022 Predictions*, media executives called out the need to 'design for cross-functional agility'. They observed that media organisations are considering how to bring together teams from across the organisation to create organisational agility, in order to respond to whatever the next content or consumer trend might be. This couldn't be more relevant to today's newsrooms.

> **We've got to be thinking about the audience's future needs. They want it on social, they want it on an app. What are they going to want in six months' time? So we have to build something that can change quickly.**
>
> IAN MCLAREN, REUTERS

"We've got to be thinking about the audience's future needs "

So what is the solution to this proliferation of formats? As newsrooms grapple with the need to manage more and more outputs, and to break down silos between linear and digital teams, one concept comes up time and time again: the 'story centric' workflow.

2. It's the story, stupid

KEY INSIGHTS

Proponents of a story centric approach promise that it can unify a newsroom and enable efficient multiplatform production

Some of the concepts are not so new; in fact, news agencies have always worked in a story centric way

A story container, acting as a central repository for news assets, acts as the common starting point for production workflows

A pragmatic story centric approach need not unify the whole production process; rather it places planning and collaboration at the heart of the newsroom

In the days when the only video news output was a nightly bulletin, newsrooms organised around the show's rundown. But this 'rundown centric' way of organising teams and workflows is increasingly unhelpful for a newsroom delivering to many different platforms.

Instead, the 'story centric' approach places the focus firmly on the editorial concept of a news story, treating the programme rundown as one of many destinations for that story, alongside website, social media, and so on.

> You would design a newsroom based around a rundown in the linear playout, and you'd start with an object in that rundown, and fill it out during the day. Story centric begins with a story object, and the idea that that will go to multiple destinations, and one of those may (or may not) be a rundown.
>
> TOM CROCKER, ROSS VIDEO

> ❝ **Story centric begins with a story object, and the idea that that will go to multiple destinations** ❞

This approach seeks to better address the needs of a multi platform newsroom.

> ❝ Over time, the organisations started to build silos. And the silos were based on the outputs, not the stories. So at some point you need to say, we need to work on the story, not the output. You need a way of working and collaborating on the story.
>
> MADS KRISTIAN GRØNBEK, 7MOUNTAINS

> ❝ **Organisations built silos, and the silos were based on the outputs, not the stories** ❞

TOOLS AND TEAMS

There can be a temptation to focus on story centric systems and technologies, but in reality, the workflow and the people are what make the difference.

The responsibilities of producers are aligned very differently in a truly story centric team.

> ❝ A single producer will look after a story all day, and the programme producers will pick headlines or packages from that for their show. The story producer has the ultimate signoff for everything that goes out; the headline, the videos, the packages.
>
> LUCY O'BRIEN, EMG

This can be a significant change. Yet some organisations have worked this way for much longer. News agencies, in particular, have never had a bulletin rundown to work to. They create content to sell to news outlets, and as such their work is inherently centred around stories.

> **News agencies have always been story centric, because of the nature of the way that they're producing and distributing that information into the news organisations.**
>
> LUCY O'BRIEN, EMG

" News agencies have always been story centric "

As a result of its evolution, the term story centric has perhaps become overused and sometimes misunderstood.

> **To be honest, I think 'story centric' is a hype word for processes which have been around for 10 years or so.**
>
> MADS KRISTIAN GRØNBEK, 7MOUNTAINS

> **People say they're story centric because they send one crew out to film for three different programmes, where they used to send three crews. But they don't have a producer looking after that story all the way through.**
>
> LUCY O'BRIEN, EMG

" 'Story centric' is a hype work for processes which have been around for a decade "

So how do news organisations adopt a story centric workflow successfully?

A COMMON STARTING POINT

Many news organisations have developed separate, parallel processes and tool sets for linear and digital production. The most important step in moving towards a story centric approach is to unify the workflow starting point, creating a common seed from which different versions of the story can grow.

This is in contrast to many legacy workflows in which linear and digital teams would plan and develop their own stories in totally different systems.

> The model today is broken. You have to decide at the beginning of the process where a story is going. If it's going on a channel you use one system; if it's going to an app I use another. That model can't live forever, because that's not how we're working in the newsroom now.

BRIAN HOPMAN, ASSOCIATED PRESS

> ## " The current model can't live forever, because that's not how we're working in the newsroom "

Major news organisations such as the BBC have implemented common planning systems as a significant step towards a more unified team and workflow. In doing so, they place the story at the start of the process.

> Using Wolftech has been a huge game changer for us. When you have a workforce in the thousands, getting everyone to use the same planning tool was thought to be impossible, but we've gone a long way towards doing that. Not just TV teams, but radio teams. The next step is to get the digital teams using it too. Now we're looking at whether we can integrate more tools, and use the planning system as a signpost to them.

MICHAEL EDWARDS, BBC

A common planning tool doesn't necessarily imply that every aspect of the workflows must be merged, however.

> **I don't think it needs to be one workflow. The NRCS with the rundown, and the different CMS - they will still be there. But what we'd say is you need one place to go to start the content.**
>
> BRIAN HOPMAN, ASSOCIATED PRESS

The story container becomes a repository of news assets

Instead, the common 'story container' becomes a repository for multiple teams to collect and share information and content - whether they work on that content in a common system or in their own tools.

> **A story centric approach accommodates multiple angles on a story, for all the different platforms. It's about giving access to all the objects and media around the story, making sure it's all properly referenced, properly indexed. Anything that's being gathered by the team can be shared, and used for the different versions of the story.**
>
> ROBIN KIRCHHOFFER, DALET

COLLABORATION IS KEY

As news organisations adopt story centric approaches, technology becomes the enabler of collaboration. It allows different teams to have their own specialisms, while working together to create all the required outputs for a story.

> The idea is you have a story in the centre, and you collaborate on it. You may still see you have a separate department for web or for broadcast, but they are collaborating on the story.

MADS KRISTIAN GRØNBEK, 7MOUNTAINS

Web and broadcast may be separate, but they will be collaborating

A common plan and a common story container help to align teams around their story outputs. But in the cut and thrust of a newsroom, real time communication is also critical.

> One of our objectives has been to move news production from being output based to being story based. Historically each of the teams would be producing content specifically for outputs such as linear news, or social platforms, for example. In most cases using separate planning and communication systems which didn't promote or enable collaboration. We had multiple tools for the same task. To move to a collaborative story based approach we had to narrow this to one planning tool and a common tool for chat.

MICHAEL EDWARDS, BBC

Our objective is to move news from being output based to being story based

A full story centric approach may not suit the current needs of every news organisation. But the requirement for strong collaboration is universal.

> **We're fundamentally still in a world where we're producing broadcast linear outputs, and around the edges of that trying to innovate in digital spaces. So it's very difficult to take a team who fundamentally are focused on a half hour linear bulletin, and engineer a story centric workflow that really makes sense for them. So we're coming back to better collaborative tools that enable more natural workflows and bring some of the benefits, without trying to impose such structure.**

JON ROBERTS, ITN

The linear bulletin rundown is no longer the be-all and end-all

Some newsrooms are jumping into the deep end of a story centric world, implementing end-to-end systems to manage production for all platforms. Others find that their needs are better met with a more measured approach, retaining separate teams and tools for each platform.

But one thing is certain: the linear bulletin rundown is no longer the be-all and end-all. The primacy of the story is only set to grow.

3. A production revolution

KEY INSIGHTS

Mobile phones and cellular bonding delivered a transformation in news gathering, while newsroom process moved on very little

The next revolution is now in progress, as IP studios and cloud based production become the norm

The pandemic and Covid-19 restrictions were a catalyst for change, but news companies risk returning to the orbit of the past

In the world of long form content, the processes of post production and the content supply chain have been revolutionised in the last decade, while the production process itself has hardly changed. In news, it's completely the reverse.

Mobile phone filming, cellular bonding, and IP contribution were unthinkable a decade ago, yet they are now everyday tools. But in most news organisations, these production tools feed into a newsroom process that has moved on very little.

News gathering has been transformed while the newsroom process has hardly changed

As the newsroom experiences its own revolution in story centric planning, it is worth reflecting on the production technologies that have become integral to newsgathering.

MOBILITY MATTERS

When asking our contributors about innovations of the last decade, a related pair stood out: the mobile phone, and 4G connectivity.

> " The massive shift is the move to cellular bonding instead of using satellite trucks. That has fundamentally changed the way that news can work because it makes you far more agile. You can put someone on a train with a backpack instead of driving up a truck.
>
> LUCY O'BRIEN, EMG

> **" Cellular bonding has fundamentally changed the way news can work "**

While cellular bonding has enabled newsgathering teams to stream pictures from traditional cameras back to the newsroom, O'Brien and many others see the agility afforded by mobile phones as the next logical step.

> " If I was building a greenfield news operation, I would just give everyone the latest smartphone and a steady mount for it. That's it.
>
> LUCY O'BRIEN, EMG

Of course, easier capture isn't without challenges.

> " The mobile phone has transformed the way we capture content, and the amount of content captured. So you need to process more content, but you have to do it on the same budget. You need to be more efficient, so you look to technology.
>
> IAN MCLAREN, REUTERS

The technology to enable greater efficiency is explored further later in this report, in *Automation for the people.*

IP AND CLOUD

As internet connected mobile phones have revolutionised newsgathering, the studio environment has been slower to move to IP technology. However, that's now changing rapidly as protocols such as NDI and SMPTE ST 2110 become widely available.

> " **Open source NDI allowed us to launch a TV station in under four months** "

For brand new news channel GB News, the open source NDI protocol enabled a previously unattainable level of agility.

> "
>
> **NDI allowed us to launch a TV station in under four months from laying the first cable. I don't think there's any way we could have launched a channel in that time with SDI or ST 2110.**
>
> STEPHEN WILLMOTT, GB NEWS

Live production in the cloud - explored further in the DPP's *Live Remote Production* report - is now becoming realistic too. There have been technical challenges around issues such as bandwidth and synchronisation, but viable solutions are now emerging.

> "
>
> **When you start moving professional quality video up to the cloud, that's when you get issues like timing and synchronisation. But we've now put almost everything in the cloud: the video switcher, production control, newsroom software, graphics, MAM, and so on. The difficult thing has been getting the video to work properly, and reliably, and in sync.**
>
> TOM CROCKER, ROSS VIDEO

> "
>
> **Live production in the cloud really is getting there. There's a tremendous amount of work being done: in SMPTE, in VSF, in NDI groups.**
>
> JJ EYNON, CNN

When combined with cellular and internet video contribution, these technologies bring a whole new level of flexibility to news production.

Technology is bringing a new level of flexibility to news production

> For the first time ever, we've lost the hard dependency on the newsroom. Now when we look at contribution links, we're not so wedded to the geographic location. As our resources move to the cloud, they can be anywhere.

JJ EYNON, CNN

And while live video production may only just be moving to the cloud, many other tools - such as planning, collaboration, and publishing - have been there for some time.

> In distribution, we went completely cloud based apart from satellite head-end in 2018. Since then we've been doing the same with the editorial side. The goal is that everything is cloud based. A bureau is a MacBook.

IAN MCLAREN, REUTERS

> What made us possible was cloud services. They allowed us, in the middle of a pandemic, to do all our training without a premises. It was only linear production that required us to have a physical site at all.

STEPHEN WILLMOTT, GB NEWS

" The goal is that everything is cloud based. A bureau is a MacBook "

EMBRACING GOOD ENOUGH

Alongside the advent of professional IP video protocols and tools, there has been an explosion in the use of consumer and business focused tools, such as video conferencing. The pandemic in particular acted as a catalyst, when these tools often became the only available option.

> It's easy to forget how empowering a moment the early part of the pandemic was. So we're trying to hold on to some of the technical learnings. We're still using video conferencing platforms that we would not have taken seriously before. We're trying to hold on to the bravery; to the spirit of that moment.
>
> JON ROBERTS, ITN

The pandemic was a catalyst for change in news operations

But as the experiences of lockdowns start to recede into memory, perhaps the industry needs to hang on more than ever to that spirit of bravery and ingenuity?

> The pandemic gave us licence to take risks. We operated on systems that we would not, in our wildest nightmares, have previously said were OK from a risk perspective. And yet, we did amazing things, and asked people to do things they weren't comfortable with. But as people are going back to offices, are we slowly moving back into the orbit of the past?
>
> SANDY MACINTYRE

" Are we slowly moving back into the orbit of the past? "

4. A matter of metadata

KEY INSIGHTS

Metadata capture is crucial to enabling discoverability, automation, monetisation and creating more seamless news workflows

But journalists don't care about metadata; so frictionless or automated metadata capture are needed to make strides forward

News providers must also look to the cutting edge outside of our industry, such as the highly effective recommendation systems that act without structured metadata

The News Business was clear that **metadata really matters**.

Metadata powers the discoverability of news content; good capture, tagging and cataloguing helps news journalism live longer, travel further, and make some money along the way.

Many of the contributors to this report were of a similar mind.

> I think there is tremendous value in metadata, and it shouldn't be downplayed.
>
> DANIEL ELIAS, VICE MEDIA GROUP

"There is tremendous value in metadata; it shouldn't be downplayed"

However, the industry has been calling for richer metadata for years. So what's standing in the way of metadata excellence?

THE METADATA CHALLENGE

As with many aspects of the workflow, legacy is a hurdle that many organisations have
to overcome.

> " Currently we have three different workflows and three different sets of metadata.
>
> ADITI PANDEY, NRK

But more fundamental is the question of whether journalists can ever be required or persuaded
to generate richer metadata.

It's hard to make journalists care about metadata

> " I'll give you an example. A bomb goes off. Within half an hour there will be many
> pieces of video, an they'll be labelled everything from bomb to blast to explosion, to
> the name of the place. Story centric metadata just went out of the window.
>
> SANDY MACINTYRE

Some questioned the basic premise that more metadata is always required - and whether it
delivers value to the editorial process.

> " Who's talking about metadata? It's the technology guys that are talking about
> metadata. We've rolled back the huge amount of metadata we asked journalists to
> put in, because after a few months we asked whether it was valuable - and no one
> really thought it was valuable.
>
> PETER ZANCHETTA, TV2 NORD

" Nobody thought metadata was actually valuable "

Zanchetta was open in noting, however, that his relatively small team deals with few long-running stories, and that larger organisations may have a stronger need for richer metadata. Others elaborated that content type also affects the amount of metadata that's required.

> " It depends on the output. When we're archiving a piece of sponsored content that may never be used again, you just want very lightweight metadata. But sports colleagues want really detailed data about which player made which play exactly when.
>
> JJ EYNON, CNN

RICH RECOMMENDATIONS

The real driver for great metadata in many organisations is now the publishing process. Digital platforms may need descriptions, keywords, and other context for a video or image, for example.

Metadata drives discoverability at the publishing end

As consumers are increasingly faced with an overwhelming array of content, recommendation systems are a key tool for helping audiences find the stories they care about. Such recommendation systems generally require a strong data foundation.

> " In digital distribution, you need the metadata. We are deeply invested in personalisation, so we wanted to make recommendations of news items. And we need metadata for that.
>
> ROBERT AMLUNG, ZDF

The Associated Press outlined different approaches to recommendation in their report, *Artificial Intelligence in Local News.*

Survey participants viewed story recommendations in two distinct ways. The first was from the producer side with techniques that identify related content before posting. [The second was] from the audience side, where stories would be recommended based on the reader's viewing history and preferences.

Recommendations drive engagement, and hence monetisation. So getting this right can be crucial to commercial success.

> The ultimate use for metadata is monetisation. Video is essentially a dumb asset, and you need information about that asset and the person to be matched to create value.

DANIEL WEBSTER, BLACKBIRD

Getting metadata right can be crucial to commercial success

Strong data may be important to drive contextual advertisement placement in a way that may not be entrusted to wholly automated solutions, especially for news content.

> The consumption experience is moving from push: we push people stories in a newspaper, a radio bulletin, a TV bulletin - to pull: people are searching for content. That's all driven by metadata. And you want to put contextual adverts against the content. You don't want to put adverts for flights against the air crash story. You have to have the metadata to drive this.

IAN MCLAREN, REUTERS

Nonetheless, automated recommendations and advert placement will continue to improve. One need only look at social platforms to see the future of recommendation algorithms. TikTok creators certainly do not enter rich metadata when they upload a video, yet the platform has a famously uncanny ability to show users content they enjoy.

Through techniques such as Collaborative Filtering, recommendations may increasingly be based on signals such as other users' behaviour, rather than structured metadata. Perhaps we should be careful not to spend too much time fixing today's problems, when tomorrow's solutions are already emerging?

Are we fixing today's problems, when tomorrow's solutions are emerging?

FRICTIONLESS METADATA CAPTURE

It is certainly true that an appropriate level of metadata has real value. So the real challenge at hand is how to collect and maintain that data in as unobtrusive a way as possible.

> Previously the picture of metadata would have been someone manually uploading and tagging a video file, which is very time consuming and not very helpful. But really metadata is the interchange of information across the production lifecycle. So we just try to collect and share the information as it's happening or being communicated, rather than it being something you spend time doing at the tail end, taking time away from your creative process.

DANIEL ELIAS, VICE MEDIA GROUP

> ❝ **We collect information as it's happening, rather than taking time away from the creative process** ❞

One of the potential advantages of a story centric workflow - and certainly of a centralised planning system - is the ability to harvest data from the planning process.

> Planning metadata is really important. Think of the idea that you book a guest, and when you write their name into the plan, that stays with the story through the lifecycle, right to the graphics system that puts the name on air. We need to keep that data all the way through the system, and have it entered only once.

JJ EYNON, CNN

> ❝ **We need metadata to flow all the way through the system** ❞

Many experts see this automatic collection of data which is available throughout the production process as being key to a seamless workflow for journalists.

> " Why the heck should I have to write my name on the ingest file when the camera is mine, the car is mine - we already have all the information? We never just do an interview randomly, it's been planned so why do I have to fill in all that information just to get a file into our production system?

MORTEN BRANDSTRUP, TV 2

Cues can be taken from consumer devices, where an increasing number of sensors inject metadata into content automatically - from GPS location to camera orientation.

Metadata also has a close relationship with automation.

> " Metadata needs to be highly automated. It needs to be something you can industrialise. But then it can have tremendous value for the richness of the stories. And it's needed for automation - you cannot do proper automation without metadata.

ROBIN KIRCHOFFER, DALET

" You cannot automate without metadata "

Similarly, automation can increasingly be used to generate metadata, especially as image and audio analysis become more and more advanced.

5. Automation for the people

KEY INSIGHTS

Artificial intelligence and automation are already part of a modern news operation, and the biggest opportunities are in what makes life easier for the journalists

Newsrooms have more material than humans can possibly deal with, and will require innovations in automation to sift through the daily influx of information

'Robo journalism' is now generating content at scale; the next stage of automation will be in tailoring news content types to the vernacular of each platform

As noted in the introduction, there is an expectation that considerable efficiencies can yet be gained in news workflows. Indeed, for many news organisations to be profitable as the volume of outputs they must create increases, it may be a necessity.

One of the primary means for achieving such efficiency gains is increased automation.

Technology automation in news production is certainly not new, but it continues to evolve, especially as workflows are increasingly powered by software and the cloud.

> "We embraced what we called automation in the early 2000s, but really it was integration; getting systems to speak to each other. It enabled us to be quite creative in how we crewed, for example. But we're now more interested in seeing the next generation of systems, which are a bit smarter.
>
> JON ROBERTS, ITN

> ## " We embraced automation in the early 2000s, but really it was integration "

The Reuters Institute for the Study of Journalism explained in its *Journalism, Media, and Technology Trends and Predictions 2022* how AI has become an integral part of many newsrooms.

Artificial intelligence technologies have become more embedded in every aspect of publishers' businesses over the last few years. Indeed, these can no longer be regarded as 'next generation' technologies but are fast becoming a core part of a modern news operation at every level — from newsgathering and production right through to distribution.

> ## " AI is fast becoming a core part of a modern news operation "

It is interesting to note, however, that adoption of these technologies has not been universal. Associated Press undertook an examination of AI in local news across the US, and found that many news teams were barely even aware of the technology possibilities.

> " Artificial intelligence is an exciting term, but it doesn't really speak to the needs and the realities of what's happening in local news. They need basic automations and modern content management.

AIMEE RINEHART, ASSOCIATED PRESS

> " The local newsrooms we work with are so under-resourced that they only have time to get their daily news product out the door. They don't have time to consider new technologies, or participate in industry discussions. So they know they want to do better, but they don't have time.

ERNEST KUNG, ASSOCIATED PRESS

As we spoke to a number of organisations that are a little further along the automation journey, a few key focus areas stood out.

NEWSGATHERING

Journalists are adept at understanding and interpreting information, and using it to tell stories to their audience. However, that process often includes a range of time consuming and mundane tasks, which can be automated through machine learning and other tools.

A commonly cited tool is automatic transcription, which is now widely available. When paired with automatic translation, this powerful combination can save journalists valuable time and enable them to publish a story quicker.

> **Currently when president Zelenskiy speaks on TV, it takes three minutes for us to translate and write the text, and we want it to be seamlessly translated.**
>
> ADITI PANDEY, NRK

Automation can enable journalists to publish their story quicker

Another common use-case is to automatically find information of relevance. This manifests in a few ways, including internet search alerts and 'social listening' tools which monitor social network activity.

> **Some newsrooms said journalists use saved Google searches to get alerts to beat-specific information and use third-party tools to get alerts when a website has been updated. Other newsrooms employed services like Dataminr, CrowdTangle and Chartbeat for social listening.**
>
> **Associated Press: Artificial Intelligence in Local News**

AI can also be used to find relevant information in large bodies of text information such as minutes of government meetings, or numeric information such as health statistics.

A high profile example of this is the Boston Globe, which **won a Pulitzer Prize** for its reporting on preventable road accidents, using a Google AI tool to identify patterns in data.

Similar techniques could be used for finding relevant information among the huge volume of information that newsdesks receive daily from news wires, internet searches, social media, audience submissions, and other sources.

> " It is labour intensive at the moment and we do not really have the tools for that. Every day we receive more material than we have eyeballs, so we cannot look at it all - it's not possible. Altogether now I think it's around 500 hours of material that feeds into TV 2 every day, and that's too much.
>
> MORTEN BRANDSTRUP, TV 2

" Every day we receive more material than it's possible to review "

METADATA CAPTURE

It is increasingly well accepted that a significant portion of the metadata capture which might previously have needed to be performed manually can now be automated using image and audio analysis.

> " We need to automate in such a way that we can capture metadata on the fly, such as names, locations, and so on. We want to use automation for facial recognition, transcription - we know technology is already there.
>
> ADITI PANDEY, NRK

Such functionality is now widely available in a number of newsroom management, asset management, and content management products. By processing content on ingest, search indices can be automatically populated, making content easier to find with little or no input from operators.

Contributors pointed out that even a slightly improved search mechanism in a CMS or MAM can be highly valuable in news.

> **It meant that getting pictures out that were slightly different to our competitors was relatively easy. Sometimes that's enough to give you the edge.**
>
> LUCY O'BRIEN, EMG

However, there are elements of data capture that still require human intervention. Rights data is often one such case.

> **The rights management piece has not yet been taken out of the hands of humans. The provenance of content - who shot a piece of content, where it came from - is a big piece of the equation for trust and brand value.**
>
> SANDY MACINTYRE

CONTENT CREATION

It is now possible to generate certain types of news content automatically, particularly where structured data sets are involved. Such technology is already deployed at scale in written journalism.

> **The ability of AI to write 'fluent paragraphs' is now on show at the Wall Street Journal, where it is used to write routine stories about the state of the markets, freeing up journalists to focus on other tasks.**
>
> **Reuters Institute for the Study of Journalism**

Other organisations have similar projects, including Associated Press, PA Media (with its **Radar** project which **Editor-in-Chief Pete Clifton discussed in *What's the News?***) and the BBC, which has used AI to generate stories for every constituency's election results.

At the publishing end, the increasing number of output formats open up potential for automated content versioning, to serve users on different platforms. Some are cautious about the ability for AI to generate different editorial versions of a story, preferring a human to be involved.

Others are more bullish, with systems available in the marketplace to accomplish this now.

> **We break the story into modular parts. The title, the background, the short version, the long version. If we collect the component parts, then using machine learning, we can learn how to take the different pieces of the story to deliver exactly the stories that a baby boomer or a millennial wants.**
>
> ADAM LEAH, NXTEDITION

We may reach a tipping point where automated versioning is the only viable solution

If expectations for personalisation of content continue to grow, we may reach a tipping point where automated reversioning is the only viable solution.

> **On Facebook or Twitter, you should be able to tell a story in 15 seconds, when on linear you'd have two minutes. So it's a different way of telling the story. And I believe that demography is breaking down more and more, with AI moving us closer to a one-to-one communication.**
>
> MADS KRISTIAN GRØNBEK, 7MOUNTAINS

STUDIO AUTOMATION

One of the most mature areas of automation in news - but nonetheless an important one - is studio automation.

The controlled environment of the news studio is ideal for creating pre-programmed camera moves, lighting presets, graphics, and other elements which can be attached to a rundown and simply triggered live by operators.

> ## The controlled environment of the news studio is rife for automation

> " Our studio linear product is completely automated. We have people in the gallery pressing the buttons, but it's the Mosart system running with two technical people. There's nobody on the studio floor, just the talent, who roll their own autocue.
>
> STEPHEN WILLMOTT, GB NEWS

Such technology has been adopted by broadcasters old and new. It is not uncommon for the crew of even a major studio news programme to be counted on the fingers of one hand.

> " During a broadcast we have a director sitting alone. We don't have an MCR, or anyone else. They set it all up before the programme.
>
> PETER ZANCHETTA, TV2 NORD

THE FUTURE FOR AUTOMATION

The use of automation in news production and publishing will undoubtedly continue to grow. While pre-programmed studio automation is mature, and automated content analysis is becoming so, there is still potential for more AI driven content creation.

There are other use-cases too, including monitoring of audience reactions (such as on social media), or even monitoring the diversity of sources used by a news organisation to assure its impartiality.

There are exciting use cases yet to be developed, but a huge amount of benefit can be derived by implementing the best of what's already available.

> I think we've moved so far forward that the industry doesn't even realise how far we've come. The camera captures GPS location. Transcription is leading the AI race. And there's quite a lot of pioneering work in facial recognition, object recognition, sentiment analysis.
>
> SANDY MACINTYRE

MacIntyre adds that around a quarter of AP's international video output - primarily content about the world leaders and personalities who appear most often in the agency's stories - can now be automatically shot listed through facial recognition.

> This allows producers to act as editors and checkers of the work of the 'machine', and frees up the augmented human for more creative tasks. It enables them to handle greater volume and create content at a speed previously unimaginable - speeding up the journey from camera to customer.
>
> SANDY MACINTYRE

> **We've moved so far forward that the industry doesn't even realise how far we've come**

6. Tomorrow's news team

KEY INSIGHTS

Most news operations are removing silos to create a merging into 'one newsroom' approach, with news gathering, story management and publishing centralised

Collaboration, sharing, and cross-skilling are all central to achieving this, making change management the key to success

Leadership and vision from the very highest levels of the organisation is needed to affect necessary changes

The complex matrix of stories and outputs creates a staffing conundrum for today's newsroom: to what extent should teams and individuals be assigned to a story, or a distribution platform?

Organisations we spoke to took a mix of approaches. Some align closely around the story centric model, while others felt strongly that specialist editorial expertise is required for each platform.

The matrix of stories and outputs creates a staffing conundrum

All the while, newsrooms are under pressure to reduce staff to optimise efficiency. So what does the news team of the future look like?

JOURNALIST VS PREDITOR

One of the key trends of the last decade or more is multi-skilling. As simpler software tools and multipurpose hardware have democratised key functions, staff are asked to do more.

One of the most common forms of hybrid role is the individual who can produce a story and do their own video editing; the producer/editor - or 'preditor'. These individuals can also often manage things like graphics, which are usually built from pre-designed templates.

> **Editors should be competent in graphics and designing and vice versa.**
>
> ADITI PANDEY, NRK

This cross-pollination of skills and roles is extending ever further across the newsroom. In particular, what were once specialist functions of the Master Control Room, or MCR, can now sometimes be replaced by video conferencing, or at least by software controlled IP video feed management.

> **The MCR function is part of the newsroom. But if the person who looks after it is a bit swamped, then the producer at the next desk can line up the next video call. It's easy, and the software allows anyone to do it.**
>
> LUCY O'BRIEN, EMG, SPEAKING ABOUT HER TIME AT GB NEWS

" New software allows anyone to manage the MCR "

As ever, there are exceptions to the rule. However, they tend to exist in organisations with specific reasons - such as those who share specialists across different content types.

> **The same people who produce our news programmes also produce major sporting events, or long form documentaries, or major live special events. So we don't want to deskill production teams, who might still need to run a 30-camera outside broadcast, for example.**
>
> JON ROBERTS, ITN

For those who do follow the path of multi-skilling, change management is key. Simply teaching staff how to use a particular system or perform a particular function is no substitute for a considered change management approach that considers the whole workflow.

> People from the newsroom want workflows to be more efficient, with less people involved. Journalists would like to get a story published themselves if they could. There are many solutions available, but the implementation of those tools in the newsroom is a very difficult business, because it needs a lot of change in the workflows.
>
> ROELAND AWICK, RTL NEDERLAND

"Newsroom staff want workflows to be more efficient "

MANAGING CHANGE

That change management presents perhaps the biggest challenge of all. On the treadmill of a never-ending news cycle, editorial teams have little time to think about new technology, and some have little concern for optimising the overall business if it impacts their focus on crafting a story.

> We make a lot of clever technology platforms for what we perceive to be better workflows, but at the end of the day the users are a bunch of journalists who don't care about technology. We have a story centric system, but it's not used in a fully story centric way right now, because the journalists haven't bought into that.
>
> STEPHEN WILLMOTT, GB NEWS

Journalists haven't yet fully bought into the story centric model

When it comes to producing content for different outlets, it can be hard to break the ingrained aspirations of journalists who've spent years in a television newsroom.

> Television journalists were only happy if their story was the first one in the main bulletin. That was their success criteria. So we had to get them to realise that it's more important to get the story out there. Because if you are the one that breaks the story, people keep coming back to you.

PETER ZANCHETTA, TV2 NORD

The counterpoint to this is that social platforms have their own formats, their own style and vernacular - and therefore require their own editorial experts. A number of news organisations have tried to have a common pool of journalists producing for all outlets, and stepped back from that aspiration.

> Originally we weren't going to have a dedicated digital team, but it became really quickly obvious that the digital journalists - who tended to be younger - had a slightly different skill set from the traditional journalists, who weren't really interested in producing a headline or a video for a phone. We had one or two who were supposed to be advisory, but they quickly became a separate team.

LUCY O'BRIEN, EMG, SPEAKING ABOUT HER TIME AT GB NEWS

> There's an advantage with having separate workflows and teams. We have specific online teams and linear broadcast teams. We have TV editors making old fashioned three-minute pieces for TV, and different - mostly younger - editors making pieces for TikTok and Snapchat.

ROELAND AWICK, RTL NEDERLAND

" We have specific online teams and linear broadcast teams "

So how should a news producer navigate the complex web of skills and specialisms, to form the right news team for tomorrow? Some - perhaps only part-jokingly - proposed bold solutions.

> **If I had a greenfield, I would not employ anyone older than 25.**
>
> MADS KRISTIAN GRØNBEK, 7MOUNTAINS

ONE NEWSROOM

Perhaps the best approach is to use the concept of story centric planning as an anchor to unify a newsroom in which the right experts - whether experienced broadcast journalists or TikTok specialists - can work together in collaborative teams.

> **Merging into one newsroom is what most operations are talking about at the moment, where newsgathering and story management are centralised.**
>
> MORTEN BRANDSTRUP, TV 2

" Most operations are talking about merging into one newsroom "

While individuals can maintain some specialism in such a newsroom, it is still likely that some multi-skilling will be required. As technology makes it easier for journalists and other users to manage their own tools, it is perhaps the crossover between technology and journalism that is most relevant.

> **We're looking to create a unified workflow across all platforms, with unified roles and responsibilities. We're hoping that we can cross-train technology and editorial people.**
>
> ADITI PANDEY, NRK

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It is perhaps the crossover between technology and journalism that is most relevant

For distributed, or even global news organisations, the 'one newsroom' philosophy extends well beyond a single physical space, connecting the whole organisation.

> **Our news desk works on a "follow the sun" model now. The editor's defining constraints are the hours they're working, not their location. That editor can work from home; they don't need to be at a physical desk with two phones and a PC. They work from a laptop.**
>
> JJ EYNON, CNN

But whatever approach is chosen, the importance of strategy, leadership, and change management cannot be overstated.

> **Even for new organisations, because you don't recruit only people fresh out of school, you still recruit people who have experience and legacy. So it requires some strategic vision from broadcasters and producers to embrace change from the top down.**
>
> RAUL ALBA, AVID

Change needs to come from the top

7. Tomorrow's news tools

KEY INSIGHTS

The user experience of newsroom tools must be improved, to enable journalists to do more with less friction

Technology tools and solutions must be designed with integration in mind, to work in the modern news ecosystem

There is significant tension between vendors and customers in the news space - but both want to move on from the technologies of the past

The 'one newsroom' approach requires the right tooling to connect teams and enable collaboration.

> We needed a solution that was flexible enough to manage our diverse workflows, and which could react to the evolving needs of the business - a tool with good communication layers, but also with a strong backbone for finance, reporting, integration, and so on.
>
> DANIEL ELIAS, VICE MEDIA GROUP

EXPERIENCE EXCELLENCE

There was a strong message from our experts that the modern, efficient, multi-skilled journalist needs tools that are easy to use. In short, the user experience (UX) of internal users requires more attention than it's historically been given.

The experience of internal users requires more attention than it's historically been given

> Software solutions cannot be that complicated; they should be convenient and easy to use.

PAUL CHARLESTON, QVEST

> Journalists want a simple interface to get their stories out, with all the technical stuff hidden underneath.

ROELAND AWICK, RTL

As with all production teams, journalists are resourceful. If they're not given the tools they need, or if those tools aren't easy to use, they will still find a way to do their job. But in doing so, they might create additional problems for the newsroom at large.

> Journalists go off on their own. They find their own app that does something they want to do. So if they thought the workflow didn't work before, now it definitely doesn't. Now there's even more fragmentation.

TOM CROCKER, ROSS VIDEO

For those designing interfaces, there is a very clear message: if your tools aren't easy to use, they won't be used.

> More of our foreign affairs stories were made with material from one bureau rather than the others. When I dug into this, what I realised is that this agency had a better website with a better search engine compared to the others. It had nothing to do with the material. It was about how easy it is for the reporter.

MORTEN BRANDSTRUP, TV 2

If your tools aren't easy to use, they won't be used

CONNECTED ECOSYSTEM

If users are frustrated by tools that aren't easy to use, then technology teams are equally frustrated by tools that aren't easy to connect.

Technology teams are frustrated by tools that aren't easy to connect

Very few wanted an end-to-end suite from one vendor, preferring to use a range of different applications to suit their needs. But in the fast paced world of news especially, information must flow seamlessly from one to another.

> A journalist would love to be able to publish on the website, and create something for social media, and something for television. That would be a journalist's dream. The hard bit is getting the tools to talk to each other.

JJ EYNON, CNN

> A lot of companies have a lot of tools, but so many of them are not speaking to each other.

BRIAN HOPMAN, ASSOCIATED PRESS

Some experts took an even stronger view on this, putting integration at the top of their priority list.

> " If a system doesn't play nicely with other systems, it's not best in breed. I don't care how good the interface is, it needs to work in the ecosystem.

IAN MCLAREN, REUTERS

" If a system can't be integrated, it isn't best of breed "

The good news is that the move to the cloud is often an enabler for the move to software tools which connect together more seamlessly.

> " There's a difference between change and innovation. Typically, change meant replacing one system in the workflow with another. The real innovation with cloud, APIs and portable microservices is to be able to stitch together the best pieces to create better, self-owned tools suited to your needs.

PAUL CHARLESTON, QVEST

A challenge of using best of breed tools, of course, is how to provide a seamless user experience to the journalists and operators.

> " What journalists want is one platform, one tool to log into at the beginning of the day. They don't want to have to authenticate into each of these different applications. The challenge is we've got legacy applications and services that we need underneath.

JJ EYNON, CNN

In some cases, the news organisation may choose to build their own unified interface. More commonly, a small number of critical applications - such as planning, editing, content management - might form the key tool set, integrated by the software vendors.

> **It may be a confederate solution. Once you have an architecture in place with modern APIs, microservices and so on, then we can perhaps use different tools that are meaningfully connected. Whether you have one CMS for all users is a UX decision. We really need to think about what a good UX would be.**
>
> ROBERT AMLUNG, ZDF

> **Our customers are using a lot of different applications, so we need to learn from those applications, to give them the best possible UX, and bring some of that into a more tailor made portal for the journalists.**
>
> ARNE BERVEN, WOLFTECH

THE NEED TO WORK TOGETHER

The DPP has observed in recent years that the dialogue between customers and vendors in our industry has become more open and collaborative, with partnership relationships becoming more and more common.

It is striking, then, to find that there remains some frustration between customers and vendors in the news space.

There is tension between suppliers and customers in the news space

Often, news organisations feel that they don't have the technology tools they need to realise their ambitions.

> We're still using a rundown system which was conceived in the 1980s. There's no path out of it; no replacements. We need something that goes beyond the legacy, and takes us into a world where we distribute news for linear and non-linear, for television and for social, for 16:9 and 1:1 and 9:16 and so on.
>
> ROBERT AMLUNG, ZDF

> We want common workflows across audio, video and digital platforms, and hence the technology should also support these workflows. Currently, workflows have to be adjusted because of the limitations of the technologies.
>
> ADAM LEAH, NXTEDITION

At the same time, vendors find some customers unwilling to embrace their vision of the future.

> We have people whose careers are predicated on using tools that were designed in the 1990s. So we need to leave behind a lot of the technologies of the past.
>
> ADAM LEAH, NXTEDITION

> We feel more than ever that we would like to move forward and forget about the past, but many of our customers want us to give them more of the past - of our legacy products. When people try to use more modern workflows, the key to success or failure is always change management, not technology.
>
> RAUL ALBA, AVID

> **We feel more than ever that we would like to move forward and forget about the technology of the past**

It is clear that both groups want to move forward towards the newsroom of the future. And indeed, the thousands of daily news programmes and millions of online outputs attest to the fact that, despite frustrations along the way, they are succeeding in delivering for consumers.

But a more open and clear conversation between customers and suppliers is required. Customers recognise the need to describe their vision more clearly, which will surely make it easier for vendors to work with them on solutions.

> **We are trying to at least describe the model for a future newsroom. That would be so much easier for the market to provide the service and the tools we need. We have to work on aligning our language, and we have to try to learn from across different media operations, because none of us can afford to have our own individual solution for this.**
>
> MORTEN BRANDSTRUP, TV 2

A more open and clear conversation between customers and suppliers is required

Conclusion: One workflow to rule them all?

In *Making the News*, we've explored the workflow concepts, technologies, data, and people required in tomorrow's newsroom. It begs the question: is there a single best practice workflow that can be adopted by all?

> " I don't think there is, no. We are starting these conversations, but there is not yet a consensus about what you would need in a fully integrated newsroom. It's just not there.

ROBERT AMLUNG, ZDF

> " I don't think there is yet a best practice news workflow "

At any significant level of detail, the answer is no. Different news organisations have different editorial styles, different outputs, different resourcing levels, different monetisation models. News is a diverse ecosystem in which there will always be differences between companies.

But at the same time, we can draw some high level conclusions about the path to success.

> " Having a data model that works across the business is much more important than focusing on a standardised workflow.

STEPHEN WILLMOTT, GB NEWS

THE STORY AND THE OUTPUT BOTH MATTER

In talking to experts from across the industry, some relatively consistent views emerge:

1. The concept of a story centric workflow resonates with news organisations

2. There is still value in editorial expertise for each platform

What is required is a pragmatic story centric approach

As a result, one is led to a conclusion that the pragmatic story centric workflow involves:

• a unified story planning tool and process
• a common, but lightweight, data model
• as common a tool set as possible
• as much automation as possible
• editorial specialists for each output
• excellent collaboration tools to enable teams to work together
• a hub for publishing to all platforms
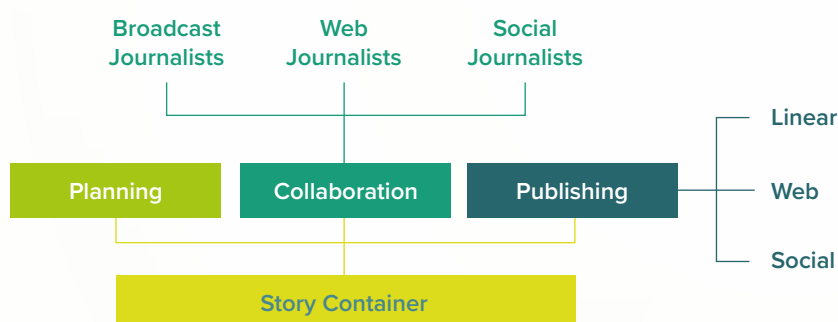
The production transformation work at Vice offers a number of lessons for others to draw on.

> There's been a lot of influence from the mobile first mentality. We suddenly could plan, produce and distribute from one device. It has had a major impact on how we think about production more broadly. But as you try to scale that, you quite quickly realise there's a lot of parallel support work involved. So that's moved us into breaking down the different steps in the workflows to look at simplifying the experience for the journalists so they can focus on their work, while everyone works around them, ensuring their stories can be shared and used by anyone at any stage.
>
> It's moved from people working independently and sharing their work on a MAM, to thinking more about planning, interconnections and moving work upstream.

DANIEL ELIAS, VICE MEDIA GROUP

CHANGE NEEDS VISION

We've seen in other areas of our industry that vision and leadership are key to effecting change. A strong example is when building the *Next Gen Supply Chain*. And the same is true in news.

> **We need to work together with technology and news to create a target operating model for where we want to be in the future newsroom.**
>
> ADITI PANDEY, NRK

> **We cannot solve it with technology, but we can support it with technology. The operation and the organisation need to be aligned with that kind to change management - it starts at the highest management level.**
>
> MORTEN BRANDSTRUP, TV 2

Change needs to start at the highest management level

TELLING THE STORY

News organisations are expert at telling stories. It's what they do.

So if they want the vendor community to help them on their journey to the future, they must apply that expertise to outlining their vision. If they can do so by working with peers to share a common vision, through organisations like the DPP or by direct collaboration, so much the better.

> **Every organisation has its own view on how things should be. I'm really happy when news organisations talk to each other to share their view, to form a unified view.**
>
> RAUL ALBA, AVID

" I'm really happy when news organisations talk to each to form a unified view "

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JOURNALIST CENTRIC WORKFLOW

Although the strategic vision must be championed from the top, it must be devised by working with the editorial teams and users. Technology alone is not enough.

> I've always felt that there's been a tradition where the technology department has come up with new technology and served it to the journalists, instead of going the other way round and seeing what we really want to do and then going out to find the technology to support the journalists' needs.
>
> PETER ZANCHETTA, TV2 NORD

The challenge here is gaining the engagement required from teams who are constantly busy with breaking news.

> One of the characteristics of newsrooms is that they're moving so fast there's never any time to reflect on what you're doing. If I go to my newsroom and ask the journalists about their workflows, they say "yes, we absolutely need to improve that". But when I ask about their pain points, they tell me, "come back next week, I need time to think about that". And next week, another big event has happened, and so they haven't thought about it.
>
> ROBERT AMLUNG, ZDF

Engaging operational and editorial teams is not optional

But difficult though it may be, engaging operational and editorial teams is not optional.
The workflows and technology are ultimately in service of their work.

> At the end of the day it's about simplicity of the workflow and collaboration.
> In order to be efficient, you need to have the tools be as simple as possible,
> to get journalists doing journalism, and get tech out of the way.

DANIEL WEBSTER, BLACKBIRD

> From where I see it, we need to have these tools, and we need to push to get
> our content out to as many platforms as we can, quickly and accurately using AI.
> But unless the journalists are spearheading that, we're just selling them technology.
> What we need is the journalist centric workflow.

STEPHEN WILLMOTT, GB NEWS

"What we really need is the journalist centric workflow"

About Avid

Avid Powers Greater Creators

People who create media for a living become greater creators with Avid's award-winning technology solutions to make, manage and monetize today's most celebrated video and audio content—from iconic movies and bingeworthy TV series, to network news and sports, to recorded music and the live stage. What began more than 30 years ago with our invention of nonlinear digital video editing has led to individual artists, creative teams and organizations everywhere subscribing to our powerful tools and collaborating securely in the cloud. We continue to re-imagine the many ways editors, musicians, producers, journalists and other content creators will bring their stories to life. Discover the possibilities at **avid.com** and join the conversation on social media with the multitude of brilliant creative people who choose Avid for a lifetime of success.