Sector Trends

Live News - Updated December 2020
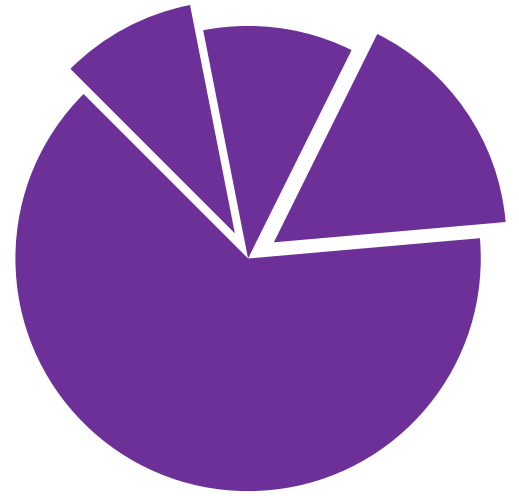
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Introduction

IABM Sector Trends Reports track developments in technology adoption, use cases, and workflow models in different sectors of the media industry such as audio, sports, and news. The purpose of these reports is to enable member companies to better understand sector-specific drivers of change. This should provide member companies more tools to better address the challenges lying ahead, from new product development to marketing strategy. These reports contain actionable insights for both suppliers and media companies.

Contact us at:
insight@theiabm.org
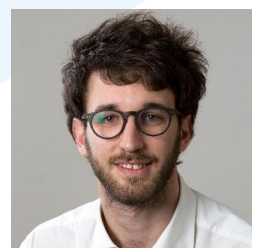
Lorenzo Zanni, Head of Insight & Analysis

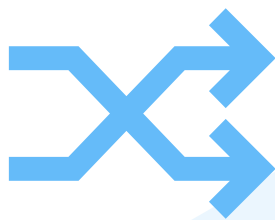**Hover over these symbols throughout the report to uncover data analysis snippets and quotes from industry insiders**

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The Sector

The unpredictable nature of news has been pushed to the extreme in 2020. The demand for news has soared at an unprecedented rate due to the coronavirus outbreak, accompanied by other major news events such as the #BlackLivesMatter movement and the US presidential elections that attracted global attention and had worldwide media coverage. Sixty-three million viewers watched the final debate between the presidential candidates Joe Biden and Donald Trump, and about ten million more watched the candidates' first debate.

The social distancing measures imposed by the pandemic resulted in major layoffs in newsrooms. Those companies who managed to keep talent employed had to send around 90% of staff to work from home, meaning remote production of live news. The BBC has made around 520 roles redundant in 2020.

Digital-native companies were better equipped for the challenges brought by the Covid-19 pandemic due to their established use of IP-based workflows and virtual infrastructures. There is a consensus among industry players that the pandemic has not actually changed any trends in the media and broadcasting industry, but rather has drastically accelerated some of those that were already underway – like remote production, virtualization, and the move to multi-platform content delivery. Technology had to adjust to rapidly changed viewing habits, and news channels experienced the most drastic viewership increase during the Covid-19 pandemic.

The Sector

As TV advertising revenue has slumped, the growing trend of the subscription-based model has accelerated.

Viewers not only use more devices to consume more news, but also use more sources of information for news content. With the move to OTT & streaming, YouTube has become the most important online source for news, while the internet has become the second most important channel for news consumption over all, closely chasing television. With increased hunger for news, social media platforms became a popular source of information, especially among a younger audience, but also increasingly attracting older internet users. Social media has been criticized for allowing the spreading of misinformation via this channel, including fake news and deep fakes.

The emerging types of journalism require new technologies and new skillsets – like mobile and data journalism. Advancements in imaging have been widely used during coverage of the US elections by adopting AR technology.

Drivers of Change

The increased demand for news content

Major layoffs in newsrooms

The move to remote workflows

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Drivers of Change

The increased demand for news content

With the coronavirus outbreak in early 2020, demand for news content soared as stay-in-place restrictions forced people to stay at home. In turn, the restrictions forced newsroom employees to work remotely. An increasing amount of material was going through newsroom teams that had to adopt new technologies to support new workflows.
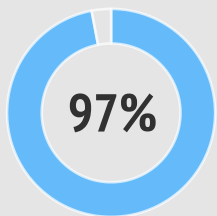
97% Today, news is being consumed by 97% of the population – this is the average across 40 countries worldwide.

14% TV news went significantly up in Europe with the coronavirus outbreak.

Source: Reuters Institute for the Study of Journalism

Nielsen estimates that viewing of live local news grew by 7% in all demographic groups in the US between early February and mid-March. Among adults aged 25+ years old, local news accounted for 30% of TV watching time. Cable news viewing time rose dramatically - up 347% compared to the same period last year.

The Covid-19 impact on the news has been immense. However, there were other spikes in news viewership in the US and around the world as well, driven by such events as the "Black Lives Matter" movement and the US presidential elections.

Drivers of Change

The increase in in-home media consumption due to the coronavirus outbreak among internet users worldwide as of March 2020, % by country

Worldwide	36
Italy	35
Spain	35
France	28
Germany	36
China	40
US	26
UK	32
Singapore	36
Australia	26
Brazil	37
Japan	36
Philippines	51
South Africa	38
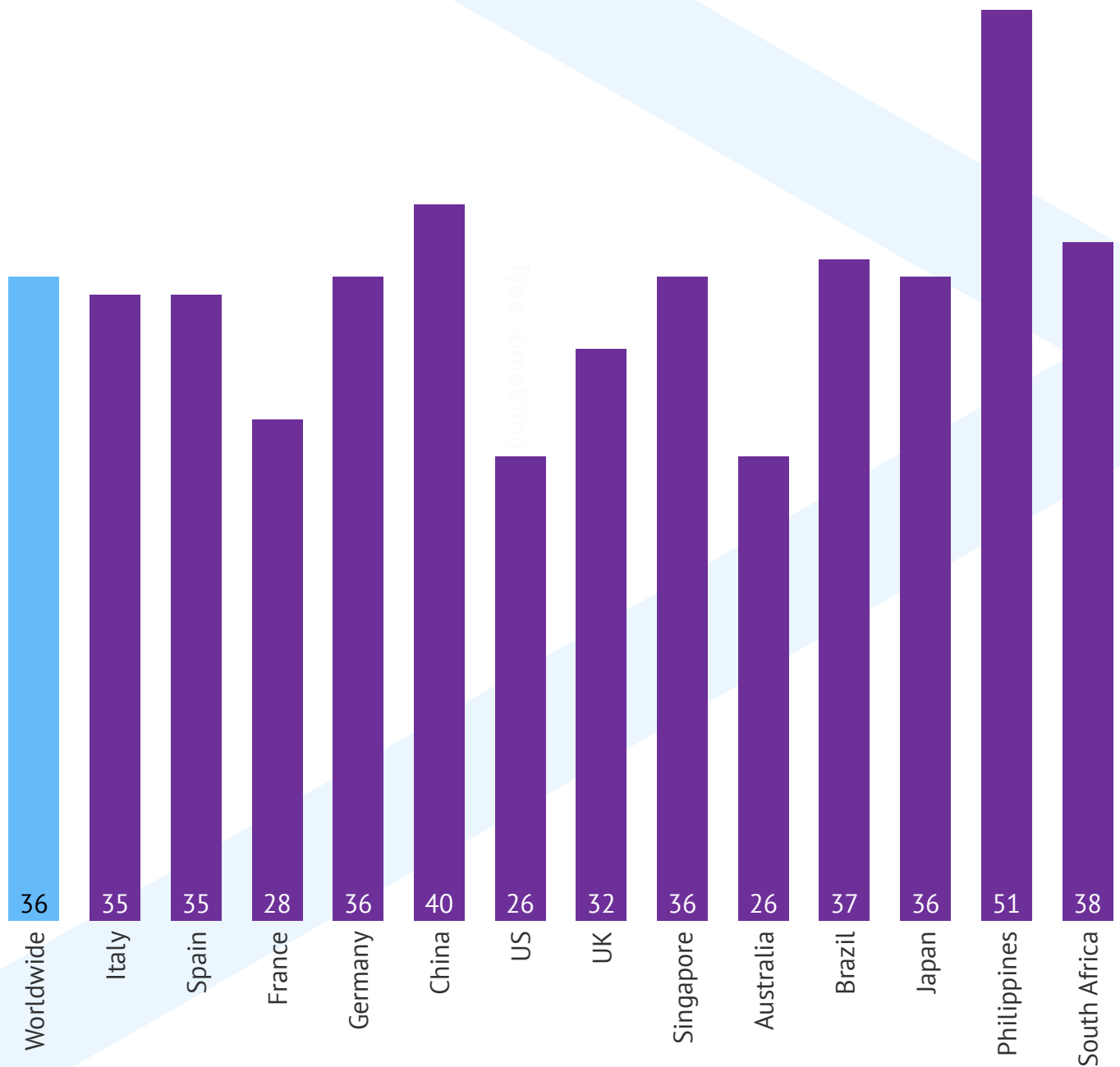
Source: GlobalWebIndex

Drivers of Change

Major layoffs in newsrooms

Hundreds of journalism jobs are being made redundant across the industry.

The BBC implemented delayed cuts of 450 staff from its news teams, following the postponed license fee deal in August 2020, that required more than three million households in the UK to start paying the license fee. Affected by a drop in the BBC's commercial income, another 70 news roles were made redundant, resulting in around 520 roles in total, with Radio 4 and political programming being affected the most. BBC has indicated that job cuts will result in the creation of centralized teams of reporters that will work on fewer stories and less on specific programs. This is accompanied by closing most of BBC's social accounts and a greater focus on digital storytelling.

The BBC's reliance on license fee income means it is less affected by the pandemic than those who rely on an advertising-based business model, resulting in major layoffs for many. Others significantly reduced the number of people present on site – from 90% or 100% of time working on-site vs off-site to around 15% with the coronavirus outbreak. This means the need to make decisions about which employees to send home working remotely and who should remain on-site and build a staffing model accordingly. As a rule of thumb, only the most essential staff remained on-site, while others started working from home.
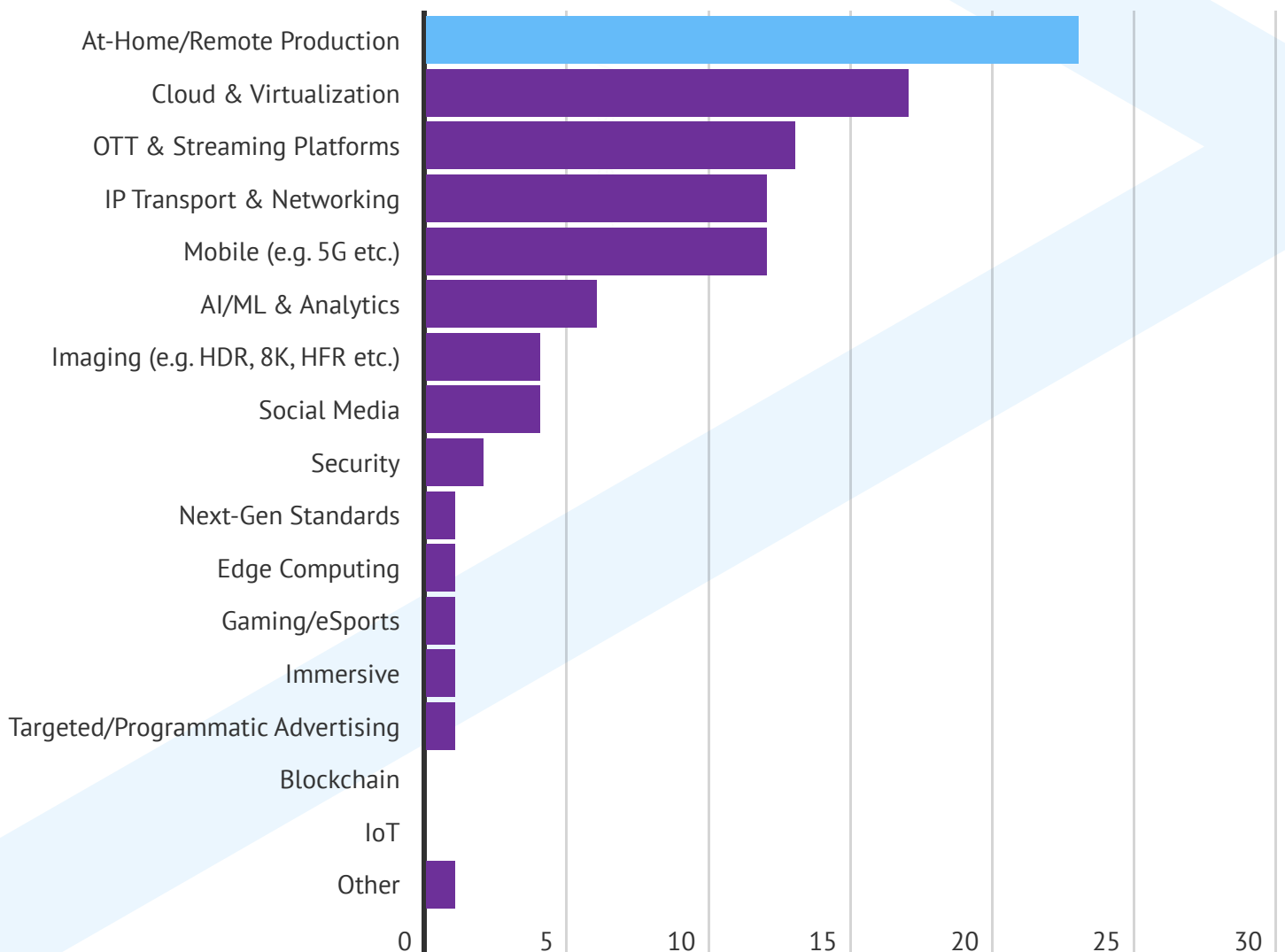
Drivers of Change

The move to remote workflows

According to the IABM's Media Tech Business Intelligence tracker, at-home/remote production is currently the most important technology for the live news sector. The live news technology roadmap is similar to live sports, with the exception of the imaging technologies (HDR, 8K, HFR, etc.), which are more important for sports, while news tends to be more reliant on mobile technologies.

Live News

Technology	Value
At-Home/Remote Production	24
Cloud & Virtualization	18
OTT & Streaming Platforms	14
IP Transport & Networking	13
Mobile (e.g. 5G etc.)	13
AI/ML & Analytics	7
Imaging (e.g. HDR, 8K, HFR etc.)	5
Social Media	5
Security	3
Next-Gen Standards	1.5
Edge Computing	1.5
Gaming/eSports	1.5
Immersive	1.5
Targeted/Programmatic Advertising	1.5
Blockchain	0
IoT	0
Other	1.5

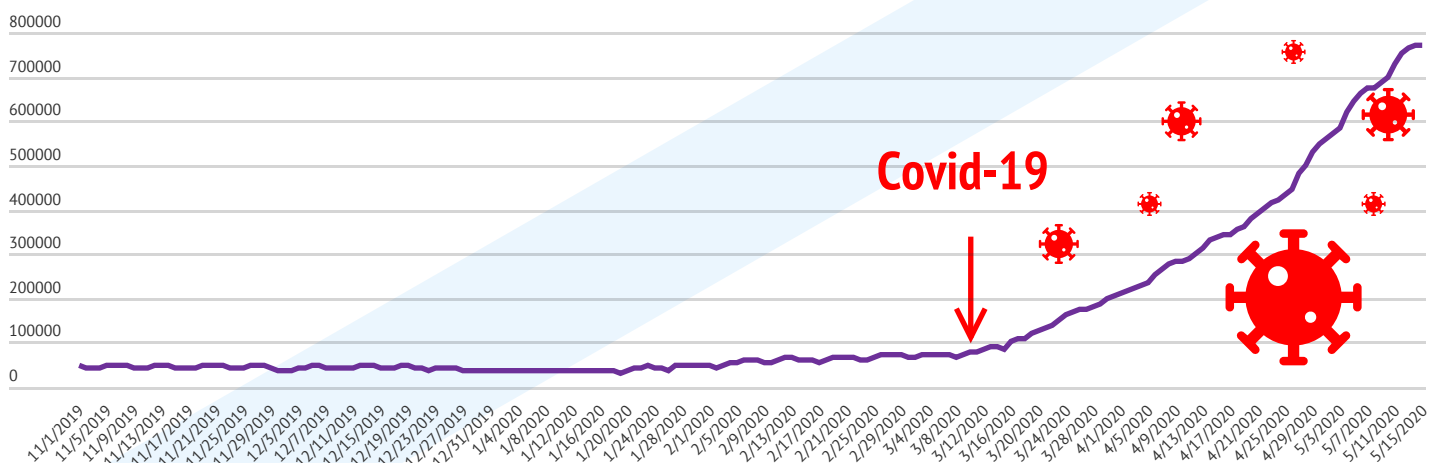Source: AIBM

Drivers of Change

Due to the event-based and field-located nature of the business, some newsrooms have already been equipped to work remotely by making more and more of their services' accessibility agnostic of the devices and locations. In many ways, the workflows that proliferated with the occurrence of the pandemic have only accelerated the uptake of systems and technology that were already in place. Those newsrooms that already had a back-end cloud-hosted infrastructure became more resilient to the coronavirus crisis in terms of technology sourcing.

Engagement with on-site equipment remotely has changed in a big way with the social distancing restrictions put in place. For instance, 75% of ITV's editing is done off-premise now by accessing the systems on-premise and in-studio remotely.

In April 2020, Zoom had more than 300 million daily meeting participants compared to 10 million in December 2019.

Daily active users of the Zoom app on android and iOS devices in the UK from November 2019 to May 2020

Source: AirNow

Amazon's AWS unit and Oracle's cloud-infrastructure capabilities enabled Zoom to perform extraordinarily in the first quarter of 2020 by helping to meet the demand for remote collaborative tools that were surging at unprecedented rates.

Drivers of Change

In their interviews with IABM, respondents underlined that the big challenge was to switch to entirely remote workflows. Although newsrooms were already prepared for short-term remote work, they were not able to leave the site entirely. This required developing new technology to allow complete remote working with disaster recovery and backup available.

News anchors were already better-equipped than others for remote production, including high-quality microphones, etc., as they delivered from the field remotely before the pandemic. For instance, Sinclair Broadcast Group had already deployed a fleet of live news units throughout the station group. Therefore, they focused on trying to get remote in other parts of the business, like control room functions and the master control functions.

Before the pandemic, Gray Television had started rolling out OTT desks designed to operate a newscast or go live from a small desk space within the newsroom with a couple of monitors and a small audio board before the pandemic hit. Similarly, digital technology changes were already being planned at EBU when the crisis started. These are the examples of the pandemic only accelerating technology adoption and processes that were already in place, rather than creating new practices and technologies.

CNN's Anderson Cooper weekly show became the first one to be produced 100% remotely. He did a show three nights a week for CNN, using two Samsung phones for content creation and vMac software to mix it all together. Interestingly, for CNN, sponsorships were the real motivator to do things remotely due to the need to run the show.

Drivers of Change

Although digital-native media organizations were more resilient to the coronavirus outbreak than others, digital-first organizations have drastically reduced their headcount through layoffs. In May 2020, Vice Media laid off 55 employees in the US and 100 internationally, Quartz laid off 80 employees, Buzzfeed another 68.

For many companies, it's been a remote version of what they normally do, where editors, producers, and graphic teams started working remotely, effecting things off-site themselves via remote control, while camera operators still had to be on-site.

As Tim Guilder from ITV mentioned in his interview with IABM,

The number of newsroom employees by news industry

Legend:
- Newspaper publishers
- Broadcast television
- Digital- native
- Radio broadcasting
- Cable television

Source: Pew Research

> All of that footage that people need to make their edits - the breaking news feeds, feeds coming in from around the world - was being turned around in an Interplay system so that everyone can search for it and gain access to it as quickly as possible.

Tim Guilder, ITV
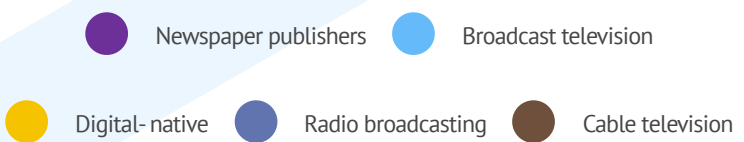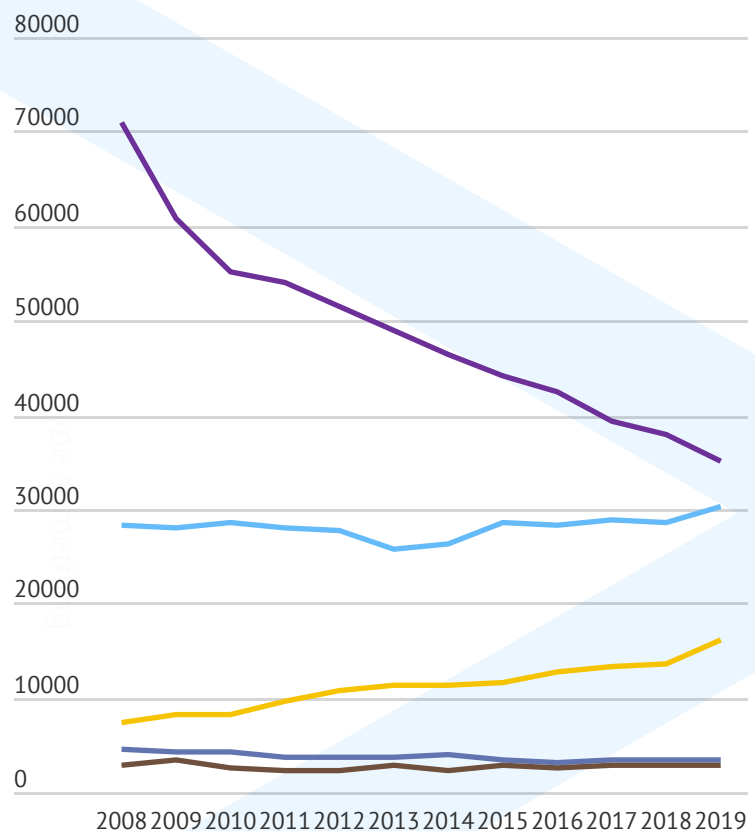
Drivers of Change

News industry on the way to virtualization

To keep delivering news at unprecedented volume, broadcasters increased their use of video conferencing services like Zoom and WebEx, although, before the pandemic, they were perceived to be too generic. We also see audio and video we'd never previously accept as "good enough" now being accepted. Others increasingly rely on broadcast-quality IP technology from companies like TVU Networks, LiveU, Dejero, etc.

Some news broadcasters say that the difference between professional broadcast and general consumer technology is usually easy to spot due to poor home Wi-Fi signal – from screen freezing and tiling to audio degradation. For others, the quality of virtual interaction was almost seamless.

Some big stories are predictable and short-term, such as the election of the US President, while others come all of a sudden – like the coronavirus outbreak – and last for an indefinite period of time, forcing companies to adopt new practices and workflows.

Sixty-three million viewers watched the final debate between the presidential candidates Joe Biden and Donald Trump, and about ten million more watched the candidates' first debate. One of the cloud-managed channel playout platforms stated that they witnessed ten times increased viewership in their OTT channels during the debates.

Live news is especially dependent on these sporadic viewership outbreaks. And their unpredictability is not only in the strength of those spikes but also their durability, and the Covid-19 pandemic is a good example of this.

Drivers of Change

In order to fulfill extra-high demand for news in times of viewership spikes, newsrooms need to plan their media capacity in advance with traditional storage solutions. Cloud technology brings agility by allowing scaling up and down based on actual demand or business needs. It enables journalists in the field to work a lot more remotely, to be able to collaborate, to access their archives, to post their stories from the field, and to access the editing tools. On the flip side, in a stable, predictable environment, cloud storage would not be a financially efficient solution due to the relatively high cost of storage compared to on-premise solutions and even more, the cost of retrieving information from the cloud, e.g., accessing the archives.

Some broadcasters mentioned in their interviews with IABM that cloud flexibility comes at the expense of long-term commitments because when all the workflows are in the cloud, it is not easy to abandon the technology that keeps all the end-user data. Hard reliance on a single cloud provider limits cloud technology users' flexibility in terms of sourcing. One of the possible solutions to this is the multi-cloud services offered by some companies. Although when it comes to building multi-cloud services for broadcasters, the complexity increases significantly.

Drivers of Change

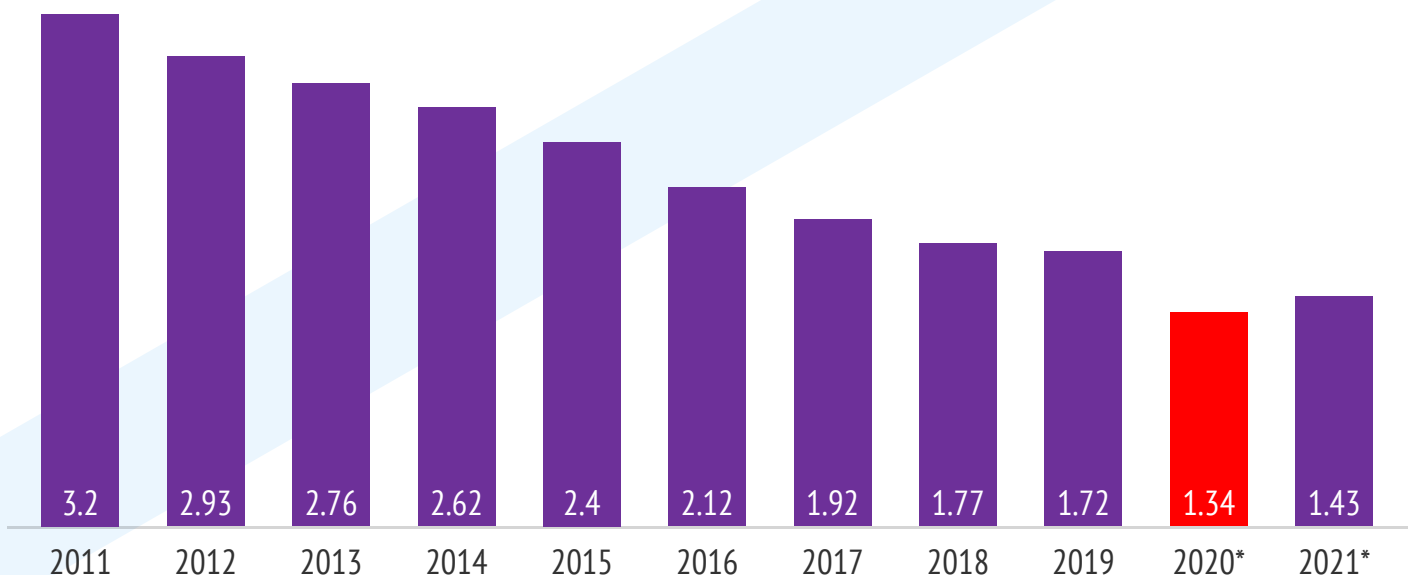## Digital impact on business models

Readers are increasingly subscribing to news sources, while publishers' advertising revenues are down.

The Atlantic magazine signed more than 36,000 new subscribers in March 2020 due to covering the coronavirus outbreak.

The New York Times signed up 587,000 new digital subscribers in Q1 2020.

The New York Times' subscription revenues for the second quarter of 2020 increased by 8.4 percent, while advertising revenues decreased by 43.9 percent compared to the same period last year. TV advertising revenues have slumped as well, while TV news remains free to viewers.

Newsband advertising revenue in the UK in billion GBP

Year	Value
2011	3.2
2012	2.93
2013	2.76
2014	2.62
2015	2.4
2016	2.12
2017	1.92
2018	1.77
2019	1.72
2020*	1.34
2021*	1.43

Source: WARC; Advertising Association

Drivers of Change

Assessing their past performance with news subscriptions, industry experts believe that much of the lost advertising revenue will come back when the coronavirus crisis is over, while relatively few subscribers are expected to leave.

New York Times Company: digital news subscribers

Number of paid subscribers to the New York Times Company's digital-only news product from the 1st quarter 2014 to 3rd quarter 2020 (in 1,000s)

Source: The New York Times

Drivers of Change

According to CNN journalist Samuel Burke, the difference between print news outlets and broadcasting is that while print journalism provides incredible quality, TV has a more unifying effect for a broader audience. This is why the subscription model for TV news may not be as successful as it is in publishing when speaking about national channels. However, the line might be blurred significantly for niche channels.

> ❝
> **Ted Turner's vision for CNN was that we would all be seeing the same thing. That type of journalism may be lost. If we don't have these unifying channels that bring us all together, there will be even more misinformation and disinformation around.**
>
> Samuel Burke, a business correspondent for CNN International

Image credit: CNN

In the UK, the internet has been scaling up to accommodate the increased amount of streaming viewership in evening hours. With the coronavirus outbreak, it had to accommodate even more viewership also during daytime.

Drivers of Change

OTT & streaming as a source of news content

OTT & Streaming platforms have increasingly become a source of information about the COVID-19 pandemic. Although television remains the most-used platform for news consumers in the United Kingdom in 2020, it is closely followed by the internet. According to a recent study conducted by Pew Research Center, about a quarter of all US adults say they get news on YouTube. And while relatively few of these people say it is their primary news source, most say it is an important way to stay informed.

Television	Internet (any device)	Radio	Newspapers (printed)
75%	65%	42%	35%
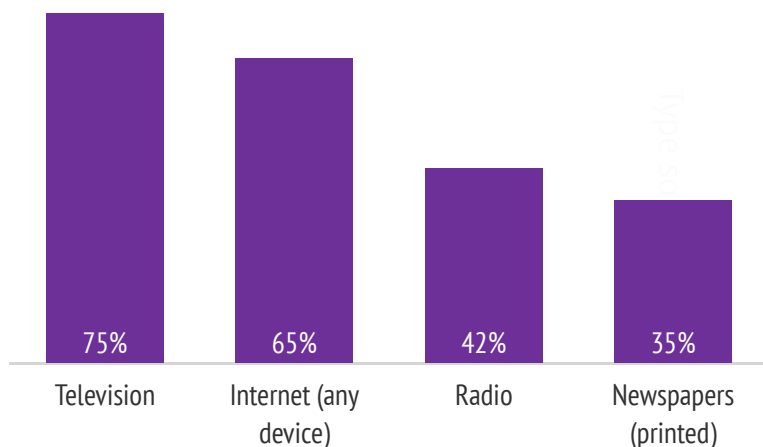
Source: Ofcom News Consumption Survey 2020
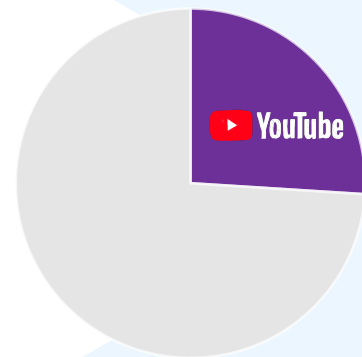
Source: Pew Research

This has pushed some linear news channels to launch their own streaming platforms. According to Steve Chung, the Chief Digital Officer for Fox television station, OTT news delivery is at a lower level of control over the delivery process compared to linear TV, while the level of viewers' expectations is the same.

The low level of control over the internet as a source of news imposes threats on news authenticity. According to research from the Reuters Institute for the Study of Journalism, 85% of respondents think that the media should do more to combat misinformation.
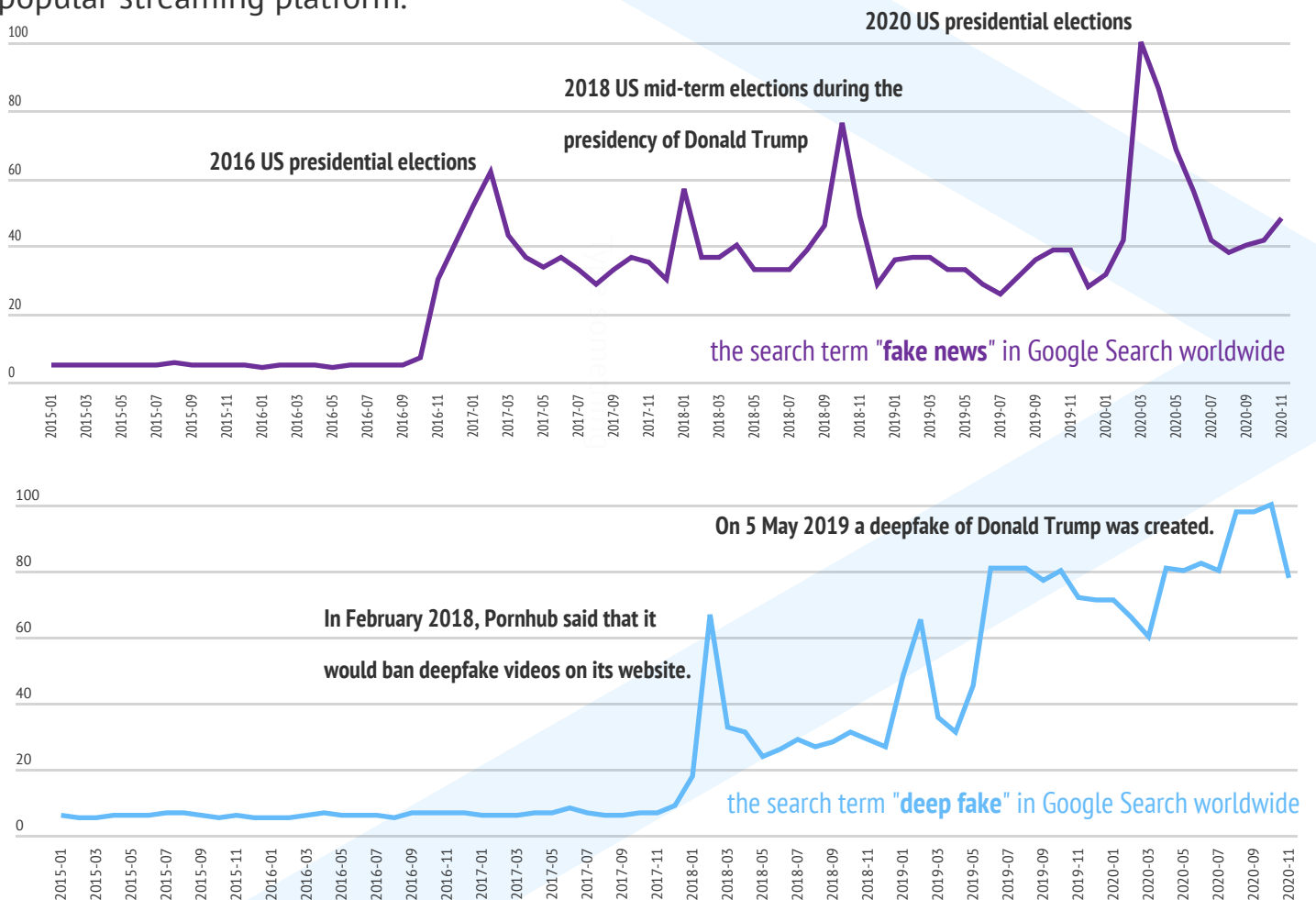
The role of technology in "fake news" phenomena

The terms "fake news" and "deep fakes" are relatively new. Google trends clearly demonstrate the emergence of the term "fake news" during the 2016 US presidential elections and of the term "deep fake" when it was first announced to be banned on a popular streaming platform.

2020 US presidential elections

2018 US mid-term elections during the

presidency of Donald Trump

2016 US presidential elections

the search term "**fake news**" in Google Search worldwide

On 5 May 2019 a deepfake of Donald Trump was created.

In February 2018, Pornhub said that it

would ban deepfake videos on its website.

the search term "**deep fake**" in Google Search worldwide

The increasing reliance on social media and citizen journalism as a source of news makes it extremely hard for the newsrooms to fact-check outsourced information. Created with or without bad intentions, false news disseminates misleading information, and social media is the most influential technology for this. Tech giants Facebook, YouTube, and Twitter are being criticized for not making enough efforts to fight fake news.

Drivers of Change

Although advancements in AI and ML resulted in the phenomenon of "deep fake," it can also be used to fight fake news and deep fakes, as the labor required to manually verify each submitted video is unviable.

In 2019, Google released a database of 3000 deepfake videos to help researchers build the tools needed to take down deep fake content. In the same year Facebook allocated a $10m budget to detect deep fake videos, where one of the key elements was creating the data set to be used to calibrate different fake-spotting systems.

In June 2020, the Joint Research Centre (JRC) of the European Commission announced plans to make its AI text mining software open-source and available for the fact-checking community. The AI tool allows users to automatically identify and monitor disinformation, from flagging fake news to tracking suspicious sources.

Through white-labeling or SDKs, AI solutions can now be integrated into existing practices quite quickly. Working hand-in-hand with the press, AI solutions contribute to content verification by speeding up the process of gathering audio/video content, allowing journalists to focus on storytelling.

On the 1st September 2020, Microsoft released a tool to spot deepfakes. It has also announced a separate system to help content producers add hidden code to their footage, so any subsequent changes can be easily flagged.
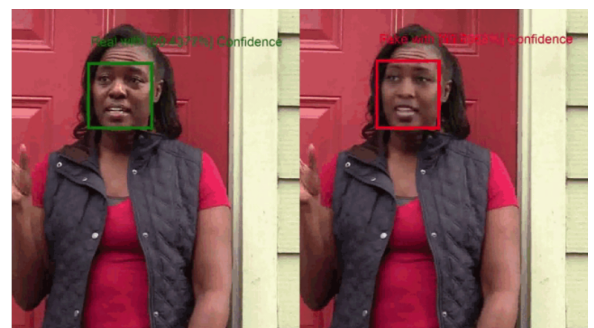

Image credit: Microsoft

Drivers of Change

Mobile Journalism

Mobile journalism is an emerging form of media storytelling where reporters rely entirely on mobile devices – such as smartphones and tablets – to gather, edit, and deliver the news. Often, the ability to be entirely autonomous is mentioned as an integral part of mobile journalism. Mobile Journalism gives the ability to receive information from many more contributors around the world.

One of the widely discussed topics with regard to mobile journalism is that it provides the possibility for reporters to gather content which they would not be able to get otherwise. Journalists are often targeted for reporting on demonstrations or restricted from accessing conflict zones.

For instance, in August 2020, authorities in Belarus withdrew the accreditation of a number of foreign journalists who had been reporting on post-election protests, including BBC journalists, as well as suspending local news providers - the country's main independent news organization Tut.by and Naviny.

Back in March 2012, Al Jazeera English aired a documentary filmed entirely with an iPhone because Al Jazeera reporters were banned by the Syrian government, which was targeting journalists covering the conflict. By using a smartphone, the undercover journalist was able to gather content that otherwise would not have been seen.

As traditional journalism adapts to constant change to meet audience expectations, mobile journalism becomes an important alternative in terms of credibility and timing. Many industry experts share a view that audiences became more used to unprofessional settings. In the trade-off between production quality and authenticity, viewers move towards authenticity. The coronavirus outbreak has accelerated this trend.

Drivers of Change

The emergence of smartphones and digital technology, as well as Wi-Fi and 5G, were crucial for the emergence of mobile journalism. The lack of internet connectivity creates major problems for journalists. For instance, reporters that covered protests in Belarus had issues with delivering content, as internet connectivity and cellular services in Belarus were cut off amid widespread protests over Belarus' presidential election results.

Today, smartphones have become not only crucial devices for news consumption; they also serve as pocket-sized media hubs for mobile journalists. Cloud technology enables journalists to collaborate, access the archives, edit, and transmit content to newsroom servers or social media platforms directly from the field. Live broadcasting may be one of the biggest advantages of mobile journalism. Some productions are delivering IP kits that include IP-enabled cameras that automatically point at the proper IP address when connected to a local internet network to make remote productions possible. Several Sony customers use cloud technology to upload news clips and stream directly from camcorders straight into the studio.

Mobile journalism requires new skillsets vs. traditional journalism – journalists need to be well-trained for going mobile. Apart from traditional technical competencies, mobile journalists must be skilled in storytelling, verification of the content, and packaging it for mobile devices. They have the skills to complete the whole content supply chain – from Create to Publish and Consume. A mobile journalist should be able to create news packages at a faster pace than traditional news reports, shooting and editing on the go. Popular ready-made kits for mobile journalism may be supplemented with hardware add-ons and create best-of-breed portable equipment for any specific need. With apps such as Periscope and services like Facebook Live, journalists can deliver on the go while boosting audience engagement.
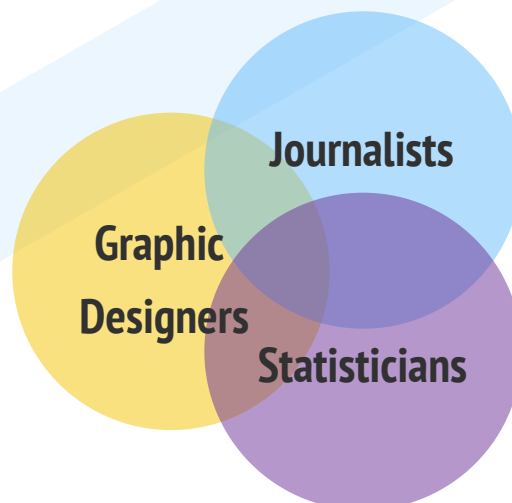
Drivers of Change

Data Journalism

Data Journalism is the process of reporting facts using structured data as the core of storytelling and is a growing trend in publishing since 2009. It shifts the focus of journalistic storytelling from writing to data mining, analysis, and visualization. Google trends reveal the increased interest in the topic since 2012, reaching saturation in 2014.

The search term "**data journalism**" in Google Search worldwide.
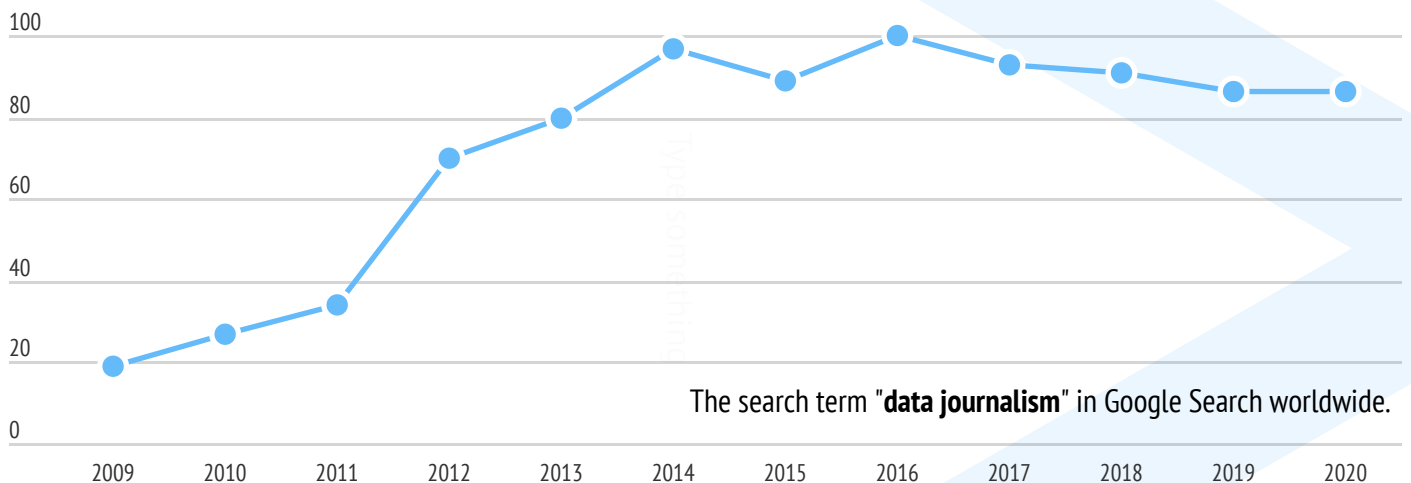
The analysis of reader stats by publishers reveals that simple data visualizations embedded into a story increase readers' engagement and keeps them on a page longer.

Drivers of Change

The move to the data-driven nature of journalism requires multi-skilled specialist groups within newsrooms, prioritizing data, and dataviz skills. Research conducted by the European Journalism Centre and Google News Initiative did not find any patterns in the organization of data visualization production within newsrooms – in some cases, it was produced by data teams, in others by visual teams, or even by specialists in virtual reality technology.

Some publishers develop training programs for data journalists in-house. For instance, the New York Times has developed a course to teach basic data skills to reporters and editors, like verifying data, evaluating statistical claims, and using software to explore data sets.

The New York Times

Attracting and retaining talent is a major worry for news organizations, especially in technology areas. According to the Reuters Institute for the Study of Journalism, only one in four news organizations says they are confident about keeping data scientists and technologists compared with three in four for editorial staff. The reason behind this is competitive salaries and better job security from tech companies compared to newsrooms.

- ● Data Scientists and Technologists
- ● Editorial Staff

Drivers of Change

The increased processing power of modern computers makes it possible to manage large data sets on small laptops, while cloud technology helps to keep a large amount of data secure, preventing potential data loss.

> **In terms of hardware, these days, I do pretty much all my work on a standard-issue laptop. I store some data in the cloud, but that's mostly because I don't want to lose it all if my computer melts down.**
>
> The New York Times data journalist

Mobile and social media have been disrupting the news industry for the last ten years by fragmenting readers' attention, undermining the advertising-based revenue model, and increasing the spread of misinformation. The next decade of the news industry is going to be defined by the increased regulation of the internet and by technological advances, such as AI-driven automation, big data, and new visual and voice-based interfaces. According to the Reuters Institute for the Study of Journalism, 53% of publishers are expecting podcast initiatives to be a big trend in the near future. Automated recommendation systems and AI-driven initiatives to personalize front pages are expected to be another major trend. Among other trends are audio and text analytics.
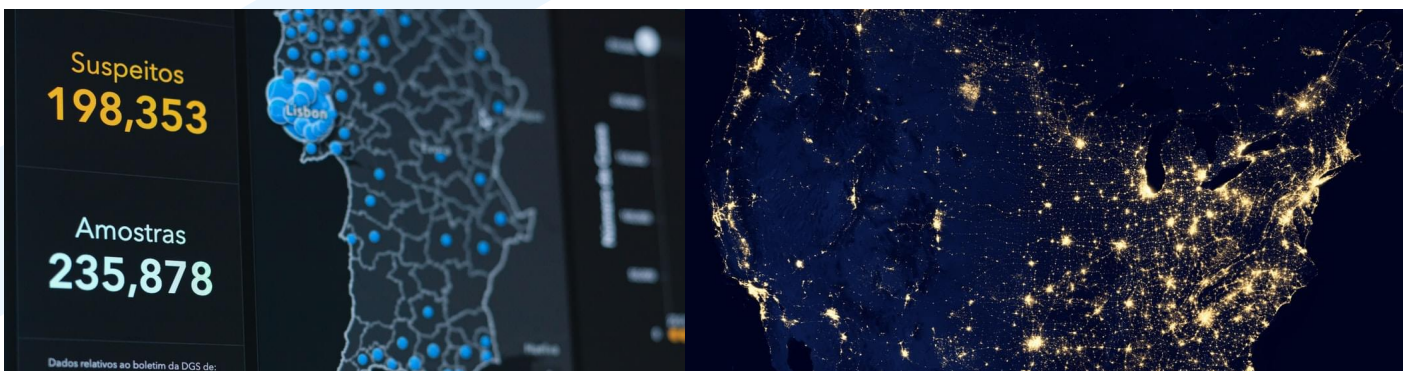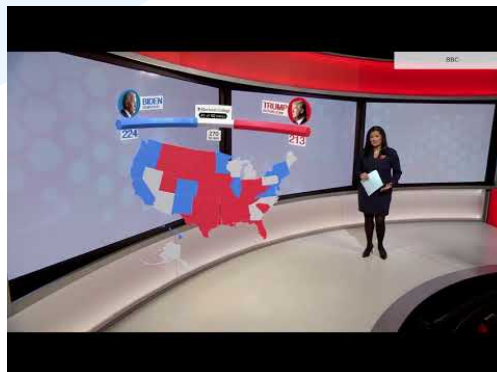
Drivers of Change

Digital storytelling through AR

The emerging field of augmented reality (AR) graphics has been in the news industry for a few years now, and broadcasters have been learning how to use this technology most effectively – when, where, and how. AR technology helps visual storytellers to deliver more stories and better engage with the viewers. It also adds cost efficiency by enabling the extension of the space of a small newsroom with augmented elements. Nowadays, there is a wide range of solution and equipment configurations to enhance the viewing experience that helps broadcasters to produce more realistic graphics, introducing the so-called "hyper-realism" concept while delivering stories to viewers. Many broadcasters around the world, including CNN, NBC, Fox, BBC, Sky, Al Jazeera, Al Arabiya, TV 2 Norway, NHK (Japan Broadcasting Corporation), and Mediacorp, among others, made use of AR technology to cover the US presidential election this year.

The US presidential elections

For instance, BBC News leveraged Arti's cloud-based augmented reality system to quickly deploy the 3D elements in their US elections coverage broadcast, like AR maps and charts. This allowed BBC News to turn additional studio space into an AR canvas and to keep the social distancing of talent while allowing data feeds to be connected to the system via a standard API. Camera tracking through the cloud-based software interface was enabled by a QR code and could output via SDI or NDI.

Drivers of Change

Another example of the presidential election coverage using AR technology is CBS News, which built a new set in the Viacom CBS headquarters in New York's Times Square for the election night.

For the same event, Telemundo transformed their second-floor newsroom into a broadcast-ready set, including a three-part anchor desk fronted by LED displays.

Drivers of Change

AR technology and immersive environments were heavily used for the US election night coverage by many Arabic broadcasters, going beyond the studio environment. For instance, MBC Group's Al Arabiya used the outside space near the Media City building in Dubai to create a huge virtual replica of the National Mall from Washington, DC.
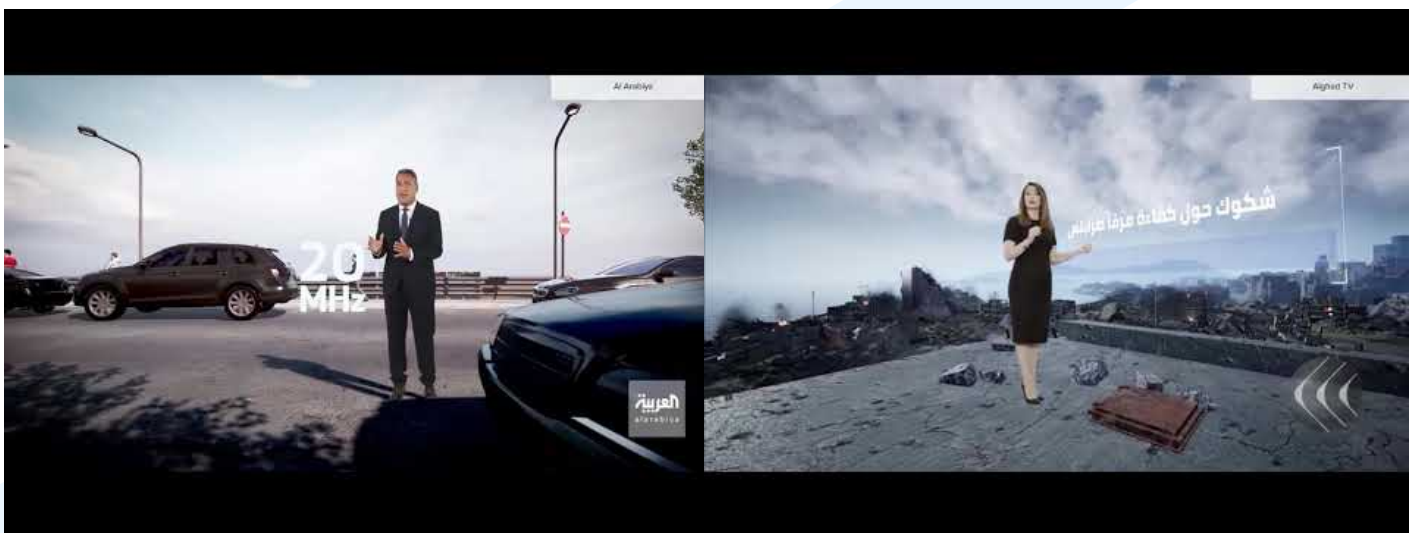
Drivers of Change

French municipal elections

French broadcaster TF1 took advantage of the Future Group's mixed-reality platform Pixotope to cover the French municipal elections. The augmented digital space was produced without a green screen in quite a small room.

Since there was no green screen, the join between two scenes was generated by Pixotope – technology based on the Unreal game engine - using matching 3D digital objects and highly accurate camera tracking.

The Beirut Explosion

Apart from the elections, AR technology has been used in non-political stories, like the massive explosion in Beirut in August 2020. At least two networks – Al Arabiya and Alghad TV – created immersive mixed reality stories to explain the science behind the incident in a clear and engaging manner.

Drivers of Change

The COVID-19 pandemic

Al Jazeera produced a coronavirus immersive mixed reality explainer using Epic Games' Unreal Engine with 3D assets from Quixel, an Epic Games partner. The segment was produced in Autodesk 3ds Max.