Media Tech Intelligence Briefing:

Content Creation & Production:

State of the Industry

February 2021

Content Creation & Production

State of the Industry

As argued in our previous Special Report, content creation and production have generally been the most affected parts of the content supply chain in 2020. The main reason behind this was the negative effect of the lockdowns on orders – due to the sector's greater reliance on hardware to drive revenues – particularly in the first half of 2020. IABM data shows that the negative impact of the pandemic on hardware has been much more pronounced than its impact on software. In the second half of 2020, we have seen an improvement in this part of the content supply chain as major revenue drivers such as sports events and content productions have made a partial comeback. Revenues are forecast to bounce back in 2021 due to major live events and studio productions coming back to drive sales. The cancellation of live events coupled with the general shutdown in other content productions have been the major drivers of the decline in camera revenues according to our Coronavirus Impact Tracker. IABM interviews with technology users also highlighted that most of them have deprioritized hardware for content creation unless absolutely needed for operational continuity. Although revenues are bouncing back, the COVID-19 pandemic has introduced structural changes to media technology demand in this part of the industry. In fact, the common theme in this part of the content supply chain is thecontrast between the rising investment in original programming and the simultaneous disruptions in traditional business models caused by COVID-19.

Content Creation & Production

State of the Industry

Content Creation & Production were severely hit by production shutdowns and live event cancellations in 2020. The acceleration in the transition to direct-to-consumer (DTC) is also forcing a rationalization of technology spending in this part of the content supply chain via its effects on the business models supporting content.

Remote production and cloud are driving new investment in this part of the content supply chain with media companies changing their plans for these transitions out of necessity in 2020. Other strategic technology areas include data-driven graphics, particularly for live sectors, and automation.

Although it upended business models, DTC is also driving more investment in original programming. This and the importance of content in media companies' strategies represent a driver of investment for content creation and production technology.

Content Creation & Production

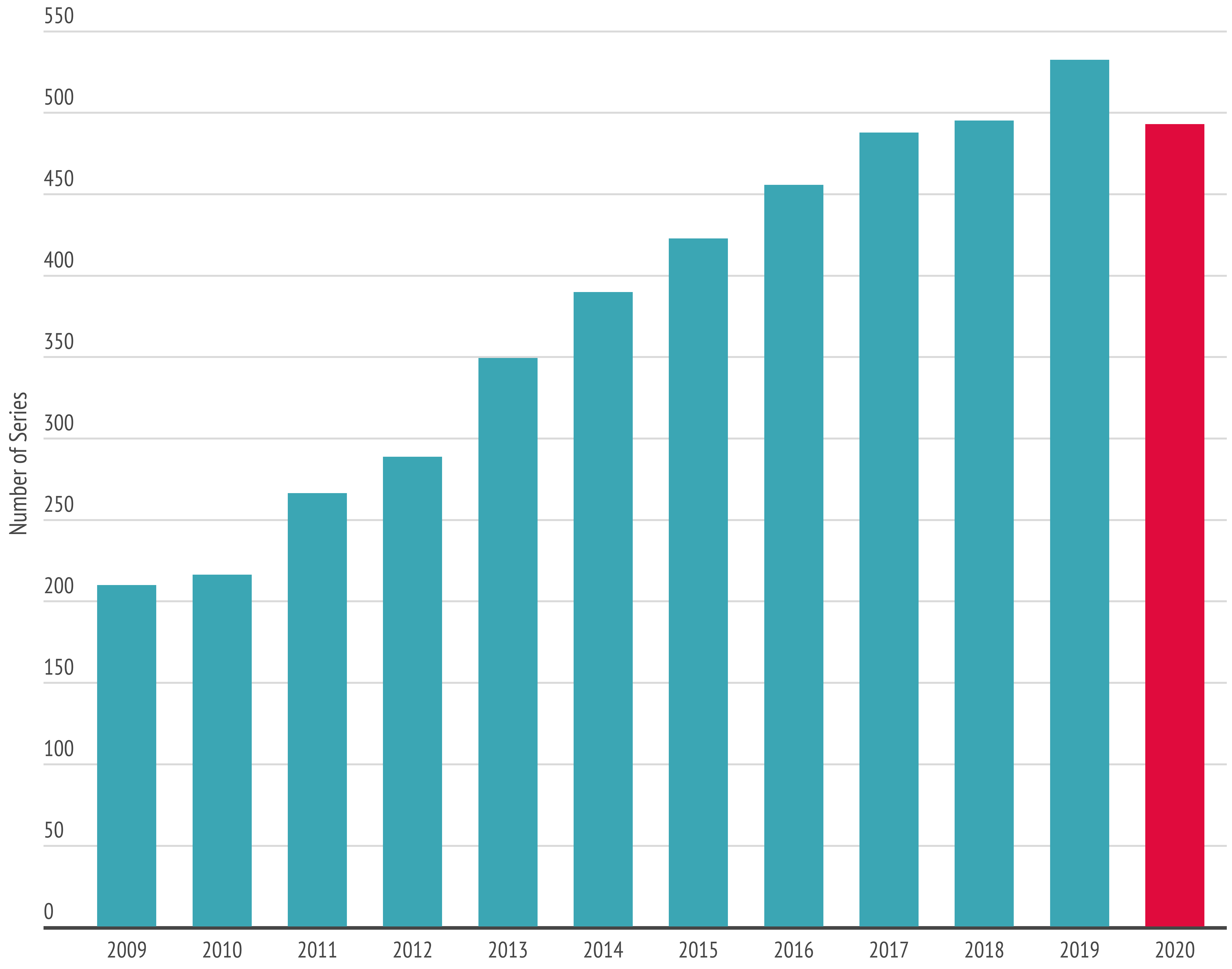
Non-live Content - Production Restart

Non-live productions have partly come back in the second half of 2020 though their occurrence remains very much dependent on COVID-19 transmission rates. Overall, production was down as suggested by the data from FX that pointed to a 7% decline in the number of original scripted series in the US between 2019 and 2020. Data from British Film Institute (BFI) points to a 21% yearly decline in film and television production in the UK between 2019 and 2020 – a better figure than what was expected when the pandemic struck in Q2 2020 due to a favorable Q4. Interestingly, spending on animation decreased less significantly than other content types, showing that production may have partly shifted to a non-physical content genre to keep up with programming pipelines. Data from FilmLA on shoot days in Los Angeles, a major worldwide production hub, shows production time plummeting in Q2 2020 and partly recovering in Q3 and Q4 2020. Recent releases from FilmLA though point to a significant reduction in production at the end of 2020 due to a dramatic rise of COVID-19 cases in the Los Angeles area. Between the second week of December 2020 and the first week of January, the number of unique productions decreased from 306 to 52. The data release states that “CBS Studios, Warner Bros. TV, Universal Television, Disney Television Studios, and Sony Pictures Television all indicated recently that they were pausing production until at least mid-January” due to the impact of COVID-19.

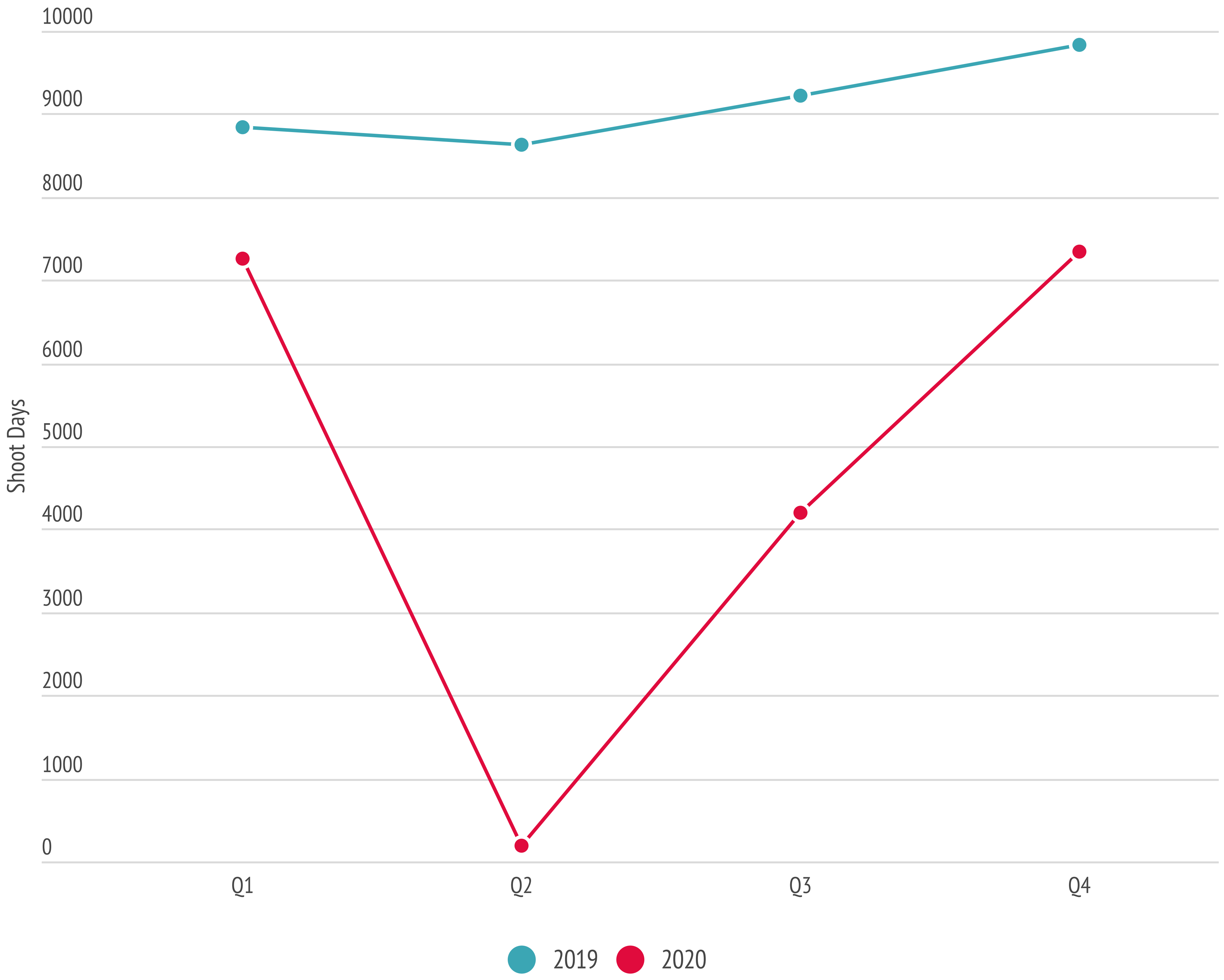
Content Creation & Production

Non-live Content - Production Restart

Number of scripted TV series in the U.S. 2009-2020



Shoot days in Los Angeles Area, 2019 and 2020



Sources: IABM, FX Networks Research, FilmLA

Content Creation & Production

Non-live Content - Production Restart

The FilmLA data shows that production schedules remain vulnerable to COVID-19 disruptions depending on the specific geography. Arguably, content creators with a global production footprint could shift their investment to safe hubs, mostly in APAC, if needed. Netflix opened two new production hubs in South Korea at the end of 2020 as part of its global expansion. Netflix said at the end of 2020 that more productions were taking place in APAC than in the US according to CNBC reporting. In geographies more affected by COVID-19, productions will continue to follow stringent health and safety rules that are monopolizing the attention of content creators in 2021. The speed of the rollout of COVID-19 vaccines will also influence production schedules, as some countries have had a quicker start to vaccination campaigns. As often argued in our industry, content remains king. The transition to direct-to-consumer (DTC) has continued to propel original content budgets, particularly at major streamers. Netflix's content budget, which reportedly reached about $17bn in 2020, is set to increase to $19bn in 2021. Other major media companies such as Disney have also announced increases in their programming budgets to support the demanding DTC content pipelines. Disney announced in December 2020 that it would spend between $8bn and $9bn on original content for Disney+ by 2024. At the start of 2021, Comcast-owned Sky announced a 50% increase in original content investment as part of its effort to double original programming by 2024. This rush is not set to end any time soon.

Content Creation & Production

Business Models Supporting Content - Cinema Sector

Notwithstanding the temporary effects of the pandemic on production schedules, this content rush is good news for the content creation community as it tends to increase investment in content creation technology. However, the business models underpinning content are also radically changing due to the impact of COVID-19, making the overall impact on technology investment less clear-cut. For example, the centrality of DTC in media companies' strategies is disrupting the cinema sector. At the end of 2020, WarnerMedia's decision to debut its new movies in cinemas and online simultaneously from this year sent shares at AMC and Cinemark significantly down. Box office revenues experienced a nightmare-like year in 2020 with Comscore estimating a 71% yearly decline worldwide. Although content budgets are increasing, the shift in business models may therefore also, arguably lead to a rationalization of spending on content creation and production technology as media companies focus on funding the expensive DTC transition. The transition to DTC involves a radical reengineering of technology infrastructures to fit the variable nature of streaming economics, which generally translates into increasing investment in cloud-based deployments as reported by IABM research.

Cinema disruption in numbers

71%
Worldwide decline in box-office revenues according to Comscore

76.6%
2019-2020 FY revenue decline for Cinemark

76.9%
2019-2020 FY revenue decline for Cineworld

77.4%
2019-2020 FY revenue decline for AMC

Sources: IABM, Comscore

Content Creation & Production

Business Models Supporting Content - Sports Sector

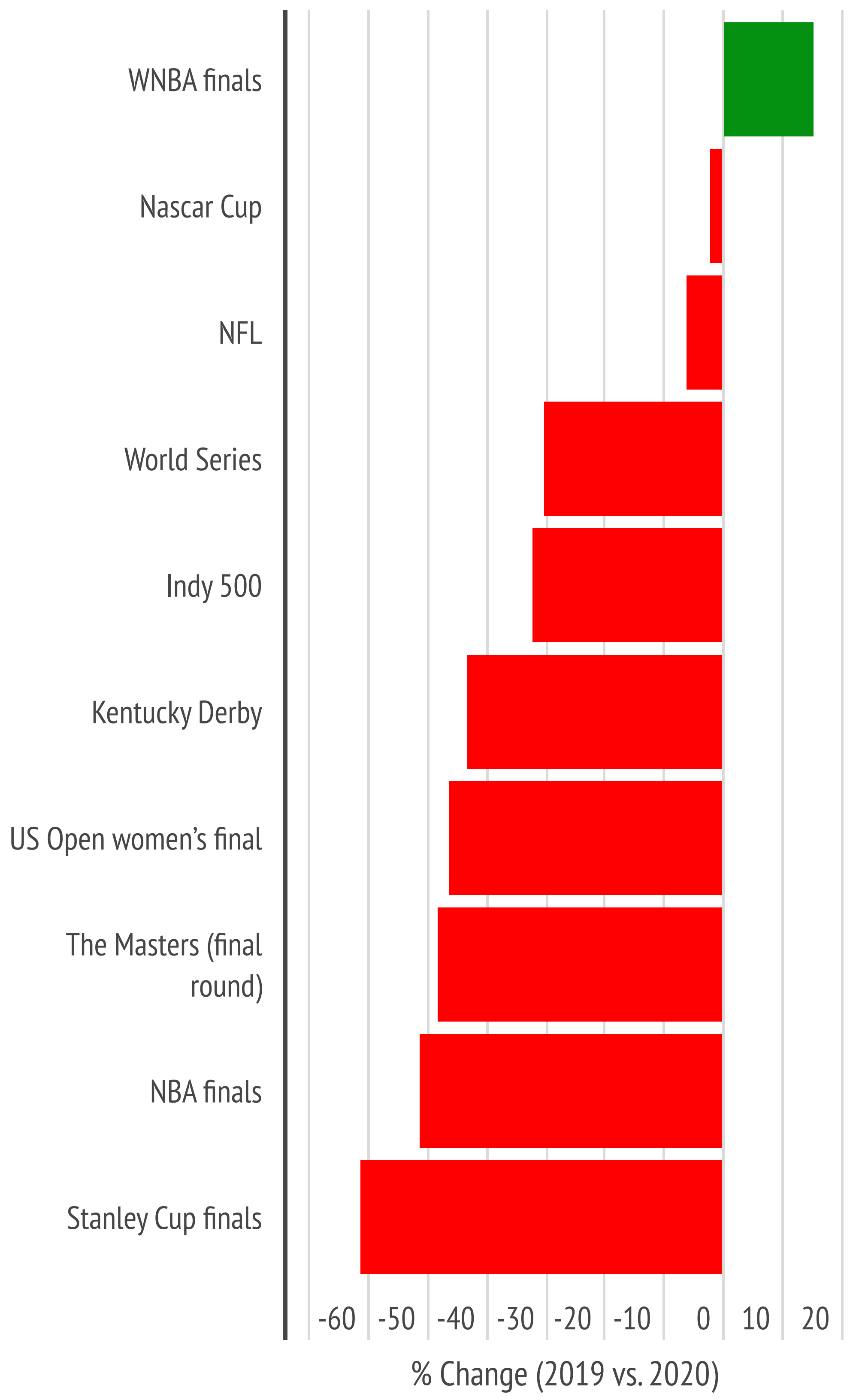
The disruption affecting the cinema industry also somewhat resembles what is happening in the sports sector. As mentioned earlier, sports events have made a comeback in the second half of 2020 though COVID-19 has affected the fragile sports business models that hinge on a delicate balance between high revenues and high sports rights fees. This was epitomized by the auction for the French Ligue 1 rights plunging into a crisis as bidders did not reach the asking price. In sports, digital business models cannot replicate the returns of linear broadcasting. For example, Disney expects ESPN+ to reach between 20 and 30 million subscribers by 2023 which at the current average revenue per user (ARPU) of $4.53 would still be a long way from the economics of the Pay-TV bundle. The rise in streaming consumption in 2020 has therefore been forcing sports broadcasters, and particularly those that do not operate solely in the sports sector, to rationalize spending. In January 2021, NBCUniversal announced it would shut down its sports network by the end of 2021 to repurpose programming to the USA Network cable channel and its Peacock streaming service. This is consistent with the rationalization happening at ESPN as well; ESPN announced it would lay off 300 employees at the end of 2020. As sports business models increasingly move to streaming, we expect budgets to be squeezed and focused on strategic investment areas such as remote production and AR graphics, for example.

Content Creation & Production

Business Models Supporting Content - Live vs Non-live

The examples of cinema and sports, albeit different, show the extent to which COVID-19 has upended traditional business models through the acceleration of the DTC transition – and the consequent rationalization of media technology spending, despite rising original programming budgets. This shows that content creation and production are also heavily affected by the transition to DTC business models, which are driving a restructuring of the whole content supply chain. Despite the parallel between these two radically different sectors, the content production crisis created by COVID-19 has affected live production more significantly than non-live programming, which is evident by media companies' content investment strategies. Live audiences, despite the temporary effects of COVID-19 on some genres such as news, have generally declined while streaming consumption – mostly for non-live programming – has soared. Therefore, the rationalization argued in this report may produce starker effects for live production technology, a major revenue source for the industry. This is not to say that live will disappear but rather that the financial models supporting live are changing.

TV ratings for major US sports



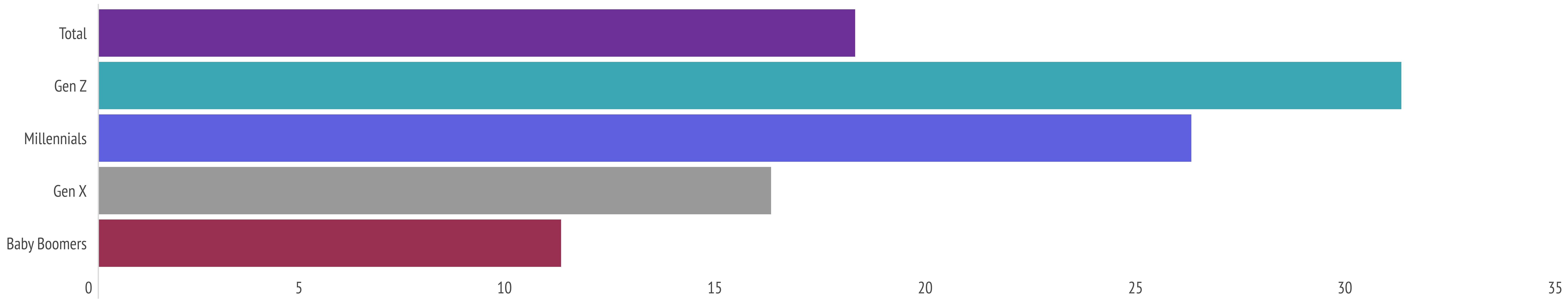
Sources: IABM, Sports Media Watch

Content Creation & Production

Business Models Supporting Content - Niche Creators

It is worth pointing out that the rise in streaming consumption is a complex trend that has spurred demand in nascent media sectors such as podcasting. Spotify revealed in July 2020 that its overall podcast consumption had more than doubled, for example. IABM research shows that these sectors, including small YouTube content creators that boast large audiences, are growing and represent an arguably untapped market for many media technology suppliers. Some content creation and production technology suppliers in the audio sectors have proactively worked in 2020 to increasingly cater to these parallel media markets.

Share of adults listening to more podcasts due to COVID-19 in the US as of March 2020



Sources: IABM, The Hollywood Reporter

Content Creation & Production

Live Content - Cloud & Remote

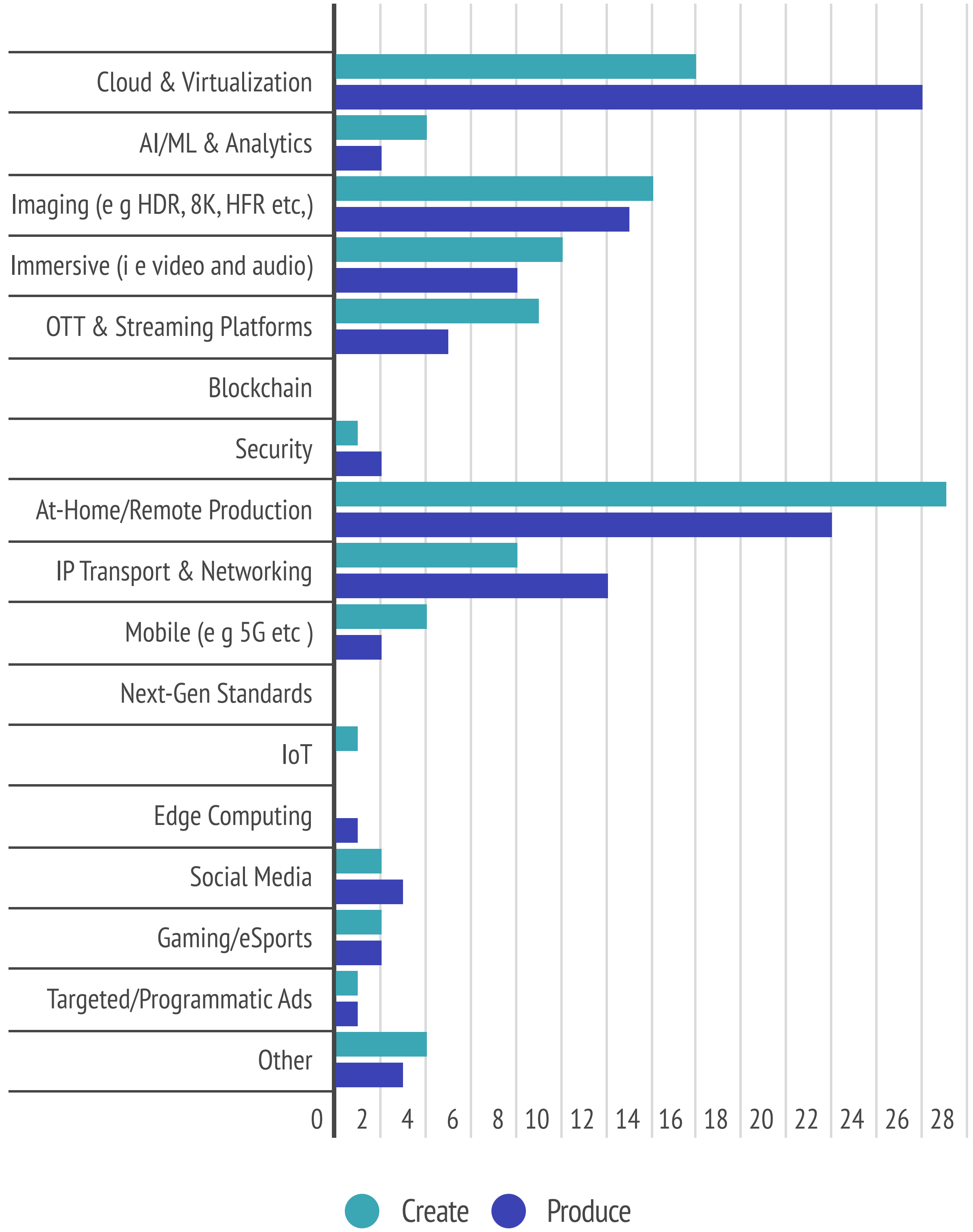
Coming back to live production, sectors such as news and sports have very much focused on enabling the transition to remote production workflows while increasing their investment in cloud-based deployments in 2020. Increasing interest in remote production has spurred investment in connectivity and driven acquisitions such as LTN Global's acquisition of DTAGS and Sony's acquisition of Nevion in 2020. According to IABM research, the main benefit of remote production lies in asset centralization in one facility, which in turn enables increased content coverage, increased resource productivity, and cost savings in terms of reduced travel expenses. Interviews with media companies underline that, in most cases, increased coverage is the primary objective behind remote production deployments. From a logistical perspective, the pandemic has forced media companies to quickly deploy decentralized remote production models. As an example of this, BT Sport moved its entire production operation out of its studio and turned it into a decentralized, remote operation, with technology such as mixing consoles, graphics systems, and cameras being sent to employees' homes. Major sports broadcasters have said that they are investing more in remote production deployments - and will do so in 2021. As an example of this, ESPN reported that its remote production capabilities will support 50% of its basketball coverage in 2021.

Content Creation & Production

Live Content - Cloud & Remote

When it comes to the cloud, the upward trajectory in investment is clear from recent announcements. At the end of 2020, ViacomCBS migrated its entire broadcast infrastructure to AWS, including 425 linear TV channels and 40 global data and media centers. ViacomCBS' transition follows Fox's migration at the end of 2019 and Discovery's well before then. Fox's transition in 2019 was particularly interesting as it enabled the broadcaster to leverage AWS Outposts to run critical media workflows such as editing and graphics and use AWS tools on-prem at Fox's facilities, a paradigm that resembles the idea of edge computing. Although ViacomCBS' transition will initially cover mainly distribution, the company plans to extend its cloud footprint to content production functions such as editing and remote production. These deals signal an increasing investment in cloud technology at the start of the content supply chain.

Technology Investment Drivers



Sources: IABM

Content Creation & Production

Live Content - Sports & News

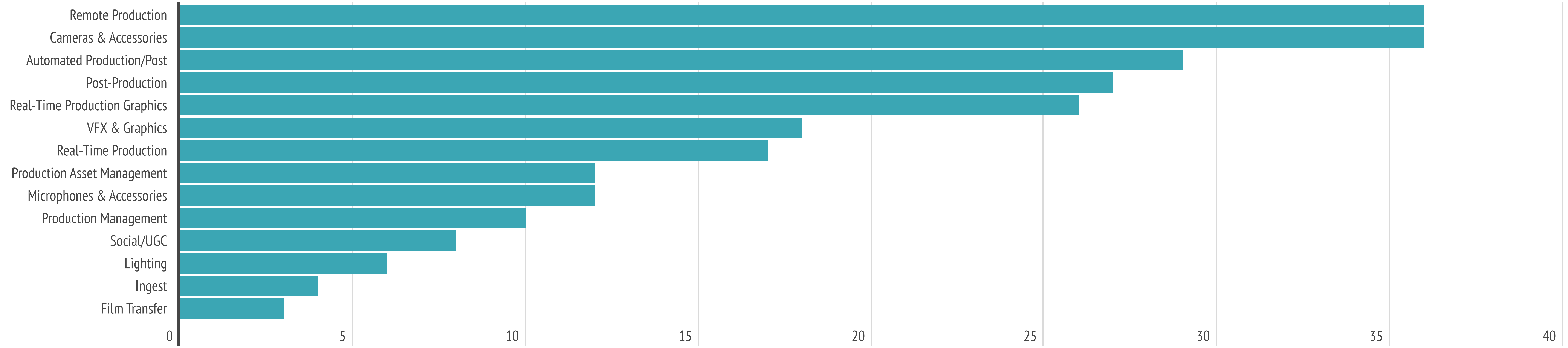
In sports, it is also worth noting that emerging sectors such as Esports grew in 2020 while traditional sports were hit significantly by the pandemic. The COVID-19 pandemic forced Esports production outlets to also move to remote production, akin to broadcasters. Blizzard, one of the largest gaming publishers in the world, had to ship cameras to players as well as migrate its infrastructure to a cloud-based environment, as explained by Corey Smith, Blizzard's director of live operations, at a SMPTE 2020 panel. In news, the rising investment in remote production has been accompanied by increasing reliance on mobile journalism as well as virtualization to enable remote working. It is worth noting that a plethora of news organizations have also implemented rationalization programs, often through layoffs. For example, the BBC, a major news broadcaster, implemented a previously delayed 450 staff cut in 2020. News workflows are becoming much more digital, through the reliance on cloud technology to ease collaboration and facilitate must-have features such as social media distribution. Another trend common to live sectors such as news and sports is the increasing reliance on AR graphics solutions to augment consumer experiences - IABM will be focusing more on this in its upcoming reports. IABM research reported in 2020 that a series of news broadcasters had refreshed their studios to enable this with sports continuing its investment as well. Sports and the pandemic are data-rich phenomena (i.e., suited to data-driven graphics) with this remaining a strategic area of investment for both sectors.

Content Creation & Production

Content Creation & Production - Technology Drivers

According to IABM research, remote production and cloud are the most important drivers of technology investment in creating and producing content. Remote production technology is at the top of the fastest-growing areas of investment. Another important technology trend impacting the creation and production sector is automation. IABM research here shows that automated production and post-production solutions are the third fastest-growing area of investment in content creation and production technology for media companies. Automation adoption is at an early stage in this part of the content supply chain, with most efforts being focused on routine workflows to liberate creative resources.

Fastest-Growing Areas of Investment in Create/Produce for Media Companies



Sources: IABM

Content Creation & Production

Post-Production

In the post-production sector, work was able to continue remotely in 2020 as opposed to physical productions though the sector was impacted by the cancellations of live events. In its Q3 2020 earnings call, Technicolor's CEO, Richard Moat, mentioned "the negative impact of the halt in live-action shooting on our film and episodic visual effects and post-production activities." Due to this impact, production services at Technicolor were down by 53.7% in Q3 2020. Technicolor sold its post-production division to Streamland Media for $36.5m in January 2021 with Richard Moat saying: "The strategic sale of Technicolor Post is part of our long-term vision for Technicolor Production Services to focus on VFX and animation for the entertainment industry, and creative services and technologies for the advertising industry, which provide the maximum value to our clients." IABM research shows that more investment has gone into cloud-based post-production in 2020 although most of the sector still relies on capital-intensive infrastructures. The large-scale migrations of Fox and ViacomCBS to the cloud though highlight that the pendulum is swinging in the cloud direction.

Content Creation & Production

Outlook

In summary, the creation and production sector has lived through one of its most difficult years in 2020 due to the cancellations of live events and production shutdowns - things improved in the second half of the year as reported in this Briefing. 2021 looks better, though the pandemic has produced some structural changes that will not go away. These include structural changes to the sectors and business models supporting content investment, albeit programming budgets are growing, and technology spending, with a larger share of spending moving to remote production and cloud-based technology. The trajectory of content investment also points to the declining importance of live in the industry vis-à-vis non-live programming needed for DTC content pipelines. Stay tuned as IABM is focusing on this part of the content supply chain in this first quarter, with more reports in our own content pipeline.