Media Tech Intelligence Briefing:

Content Distribution & Monetization:

State of the Industry

October 2021

Content Distribution & Monetization

State of the Industry

Content distribution and monetization have been forever changed by the streaming boom of 2020 as well as by specific trends such as the demand for interactivity driven by the pandemic. The significant growth of streaming platforms has accelerated the adoption of variable technology business models in distribution while hitting legacy revenues. The new paradigm features a deeper alignment between customer and supplier objectives and is built around various customer success metrics. When it comes to the specific trends triggered by the pandemic, the increasing demand for interactive experiences is arguably the most important and is causing a convergence between sectors that were more clearly separated pre-pandemic. Monetization from interactive experiences is linked with improved data capabilities at media businesses and is motivated by data gathering, as shown by recent initiatives. Data is also key in subscription and advertising models, as shown by IABM's research on these segments. In subscription-based models, data is increasingly being leveraged to manage churn and improve customer retention. In advertising, media businesses are working on hybrid offerings to differentiate themselves from the digital giants. This Briefing focuses on identifying the most important investment drivers in content distribution & monetization derived from a mixture of sources, including survey data on technology priorities, company announcements, and financial data.

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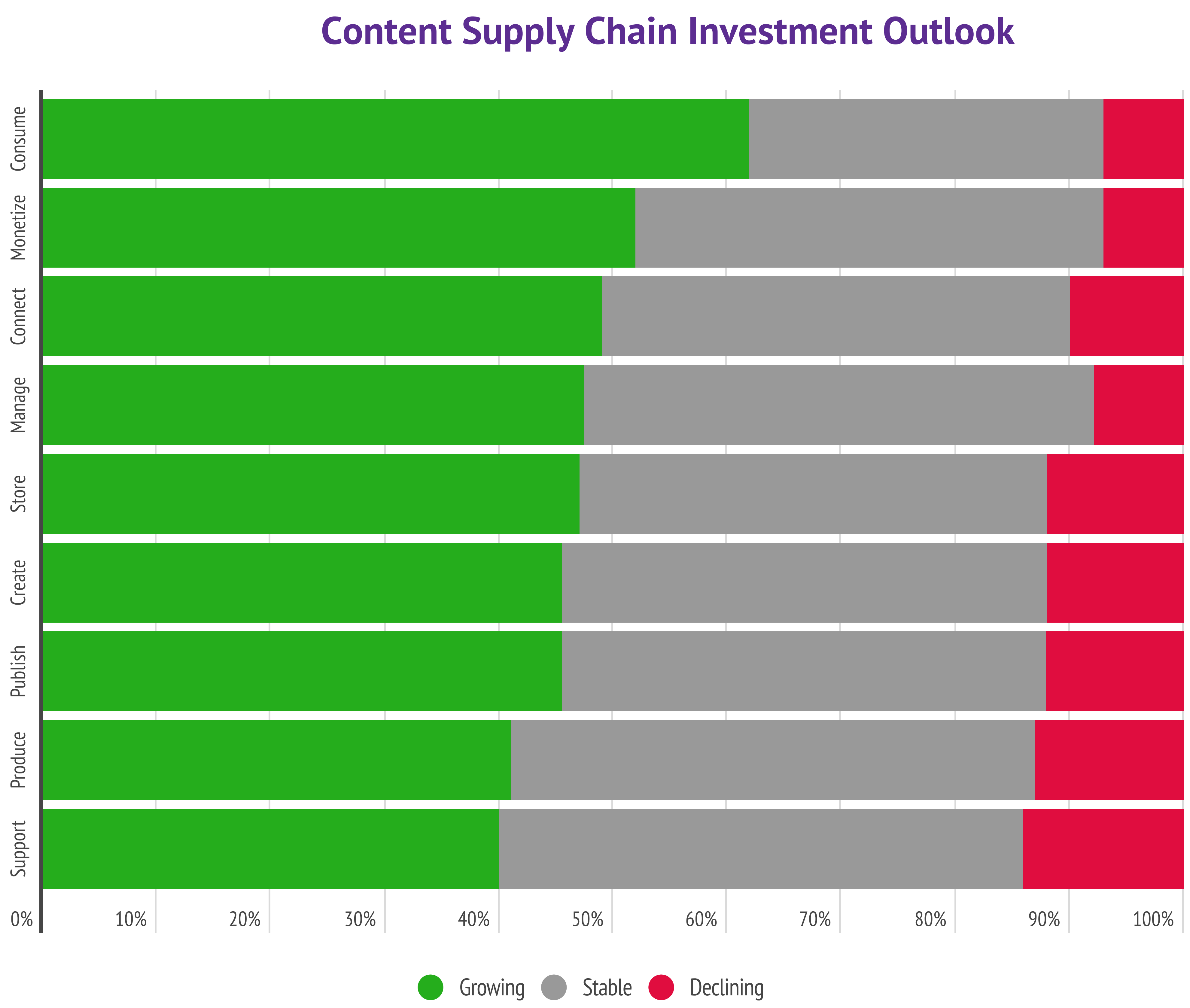
Investment in Monetize, Publish & Consume

From an investment perspective, Consume remains the fastest-growing segment in the industry, followed by Monetize. The importance of these two segments has been growing as media companies have moved to DTC platforms, making them their utmost priority. Media companies' investment in these areas is often linked with improving consumer experiences as well as focusing on revenue-generating activities. Publish is instead the third from the bottom category in the investment ranking as media companies retreat from legacy distribution infrastructures in favor of new delivery mechanisms.



Sources: IABM

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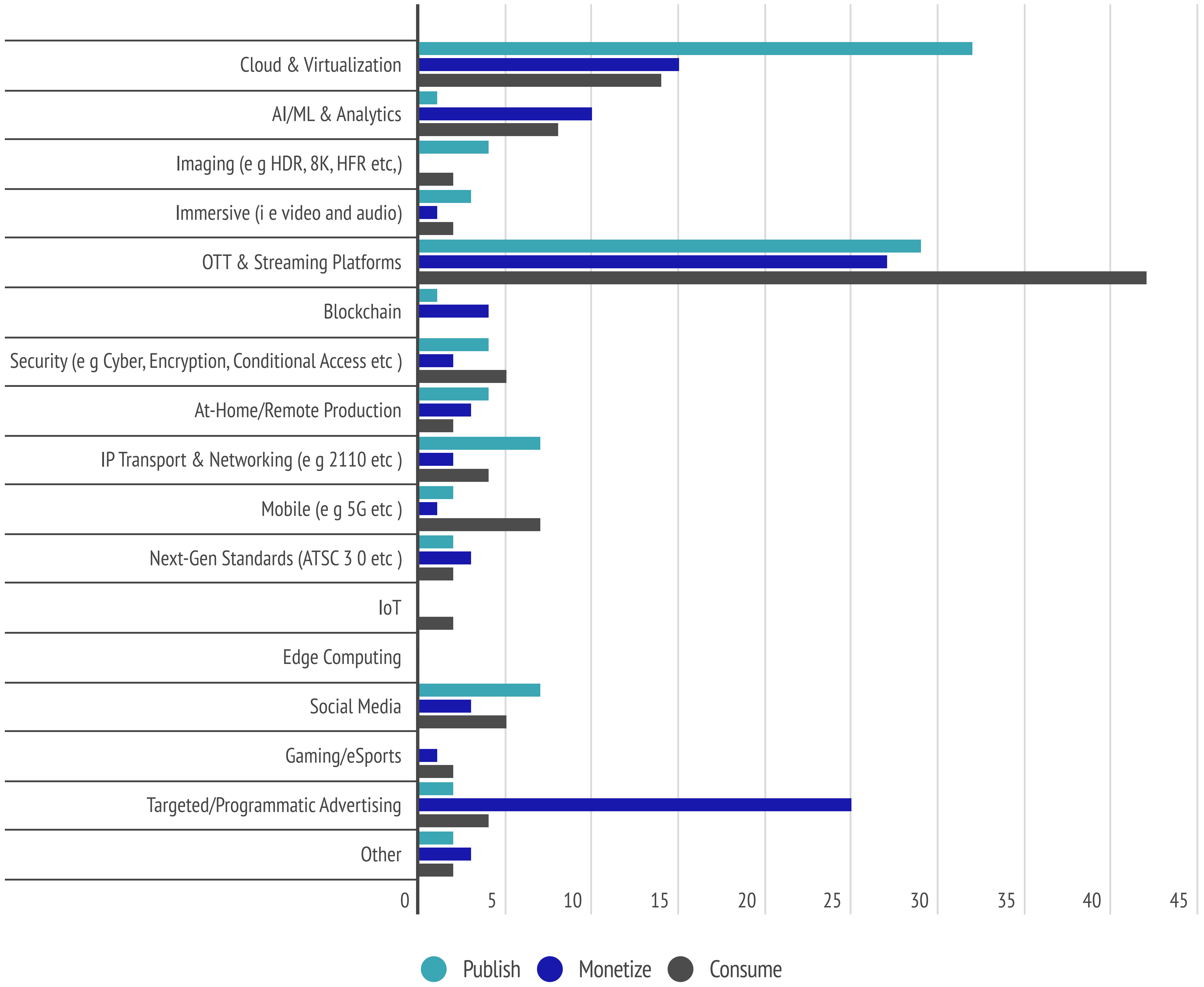
Investment drivers

IABM data shows that investment in Consume is overwhelmingly driven by the transition to DTC platforms. This is a major trend for Publish and Monetize as well, though these segments present other spending drivers too. In Monetize, the move to targeted/programmatic platforms is the second most important investment driver, as media companies increasingly leverage data in revenue-generating activities. In Publish, cloud and virtualization have significantly reduced the cost of distribution, making them the most important driver in the segment. AI/ML and analytics are also important, particularly for Consume and Monetize.

Investment Drivers in Publish, Monetize & Consume



Sources: IABM

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Investment drivers - Publish

- ↑ Streaming boom has produced significant growth in technology solutions underpinning OTT platforms
- ↑ Business model differentiation provides avenue to circumvent price compression in some categories
- ↑ Increasing demand for software development and consulting for OTT platform builds
- ↓ Investment in traditional distribution methods is declining
- ↓ Price compression in legacy categories
- ↓ Declining investment in hardware-based offerings which have represented a large share of revenues in this segment

Sources: IABM

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Investment drivers - Monetize & Consume

- ↑ Move to DTC platforms driving increasing investment in these segments
- ↑ Importance of consumer engagement data driving business model innovation and differentiation
- ↑ Hybrid business models offer differentiation as well, including cross-selling across distribution platforms
- ↓ Ad budgets migrating from linear to digital mediums
- ↓ Some media companies insourcing mission-critical systems, and particularly ad tech
- ↓ Fragmented landscape posing challenges to consumers and businesses alike

Sources: IABM

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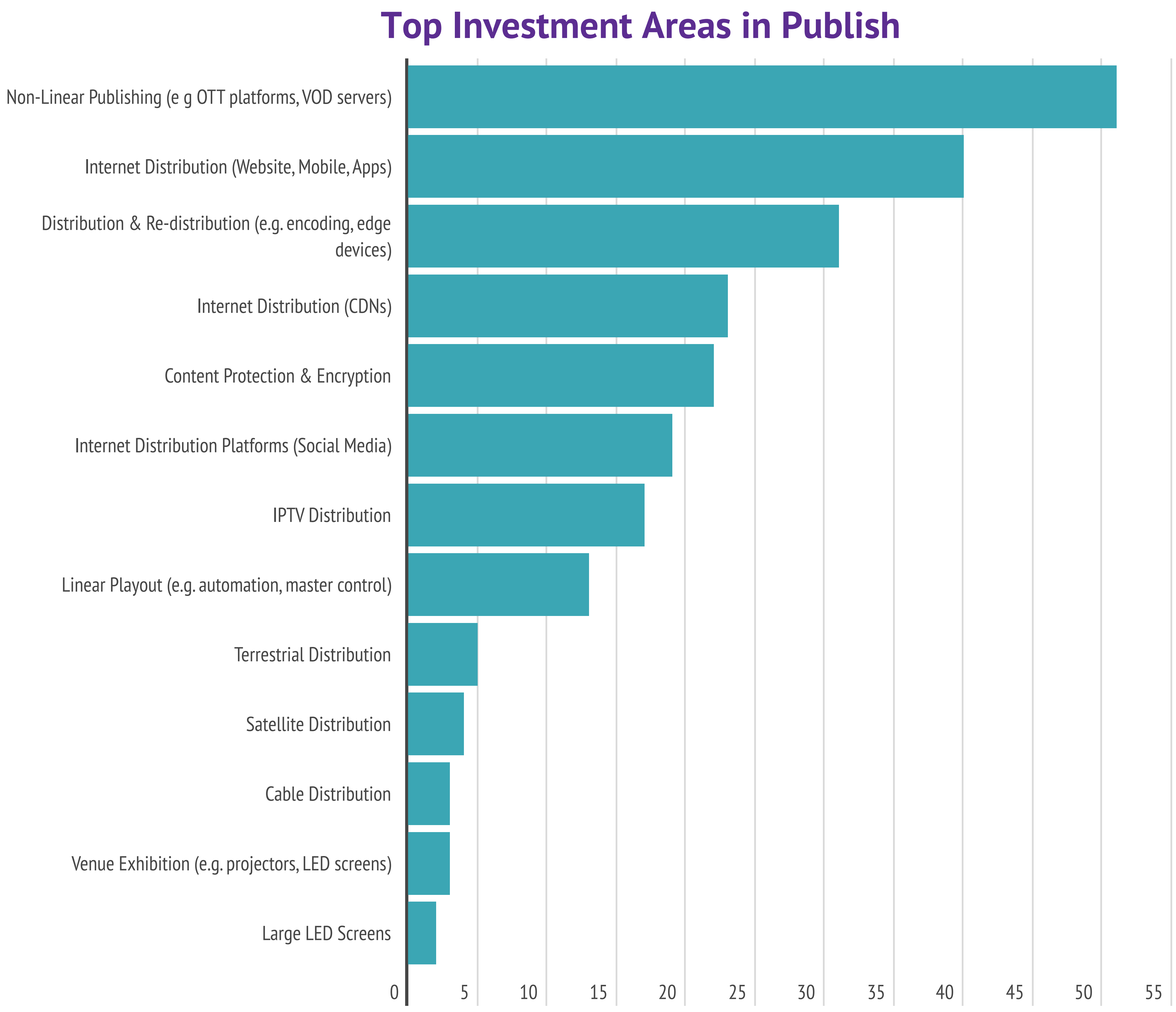
Top areas of investment in Publish

The top investment area in Publish is non-linear publishing, followed by internet distribution and distribution and re-distribution. Most of the categories at the top of this investment ranking are about internet distribution - three of the top four - while the bottom categories are associated with legacy distribution methods typical of Pay-TV models, such as cable and satellite. This polarization in investment has been driven by the move to DTC platforms as well as the increasing pervasiveness of cloud-based technology in distribution. Legacy infrastructure is still attracting investment, though media businesses are focusing on doing more with less in traditional areas.



Sources: IABM

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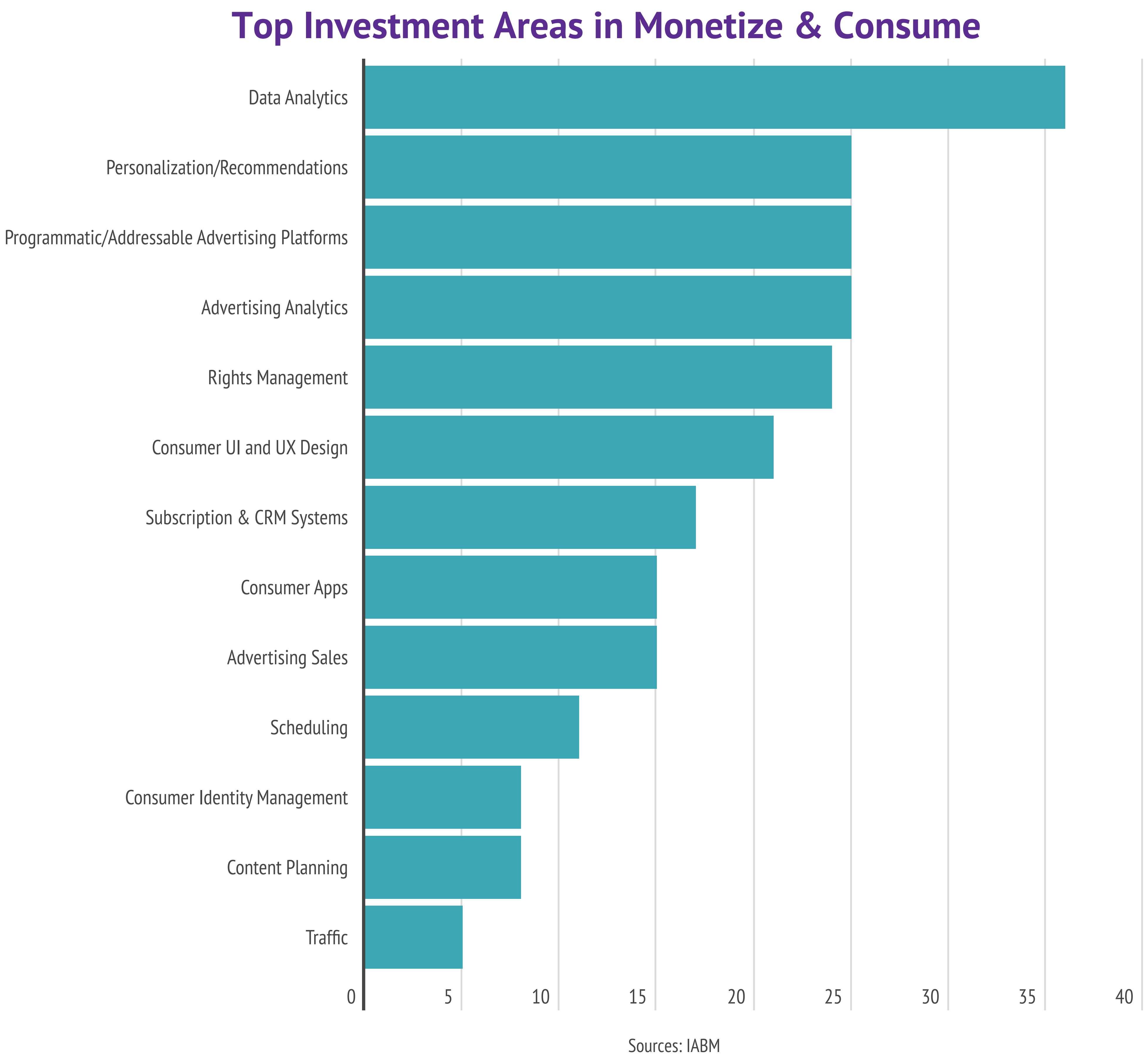
Top areas of investment in Monetize & Consume

The top investment area in Monetize and Consume is data analytics, followed by personalization and recommendation systems, programmatic and addressable advertising platforms, and advertising analytics. The common denominator of all these activities is data, which has become a more important commodity for media businesses as they have moved to DTC platforms. While content planning is still an immature activity at media companies, it is interesting to see that even in these segments, there is a polarization between linear and digital activities. In fact, legacy solutions such as traffic and scheduling systems sit at the bottom of this ranking.



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Streaming boom

The streaming boom of 2020 has arguably changed the industry forever. Most media businesses have accelerated investment in their digital platforms due to rapidly shifting consumer habits, which has, in turn, affected the demand patterns for media technology. As an example of this, Harmonic reported in Q2 2021 that its streaming SaaS revenues had grown by 68% year-on-year. In its special call with investors in June 2021, Harmonic's SVP of Video Products & Corporate Development, Shahar Bar, described the economics behind streaming distribution infrastructure as being made up of three major elements: the media processing, the packaging and origin, and the targeted advertising. This is a truly variable model as revenues hinge on indicators such as the number of assets in a library, the number of events/channels delivered, the size of the viewership, as well as the number of ad impressions. Interestingly, Harmonic said that as the popularity of the streaming platforms they serve rises, the share of media processing spending decreases with the portion of investment going into elements such as targeted ads increasing. This illustrates that streaming technology business models closely follow customer revenue-generating activities as they move towards Opex implementations, deepening the linkages between supply and demand. In the case of Harmonic, the media processing that was traditionally sold as Capex has arguably become a stepping stone for new business models.

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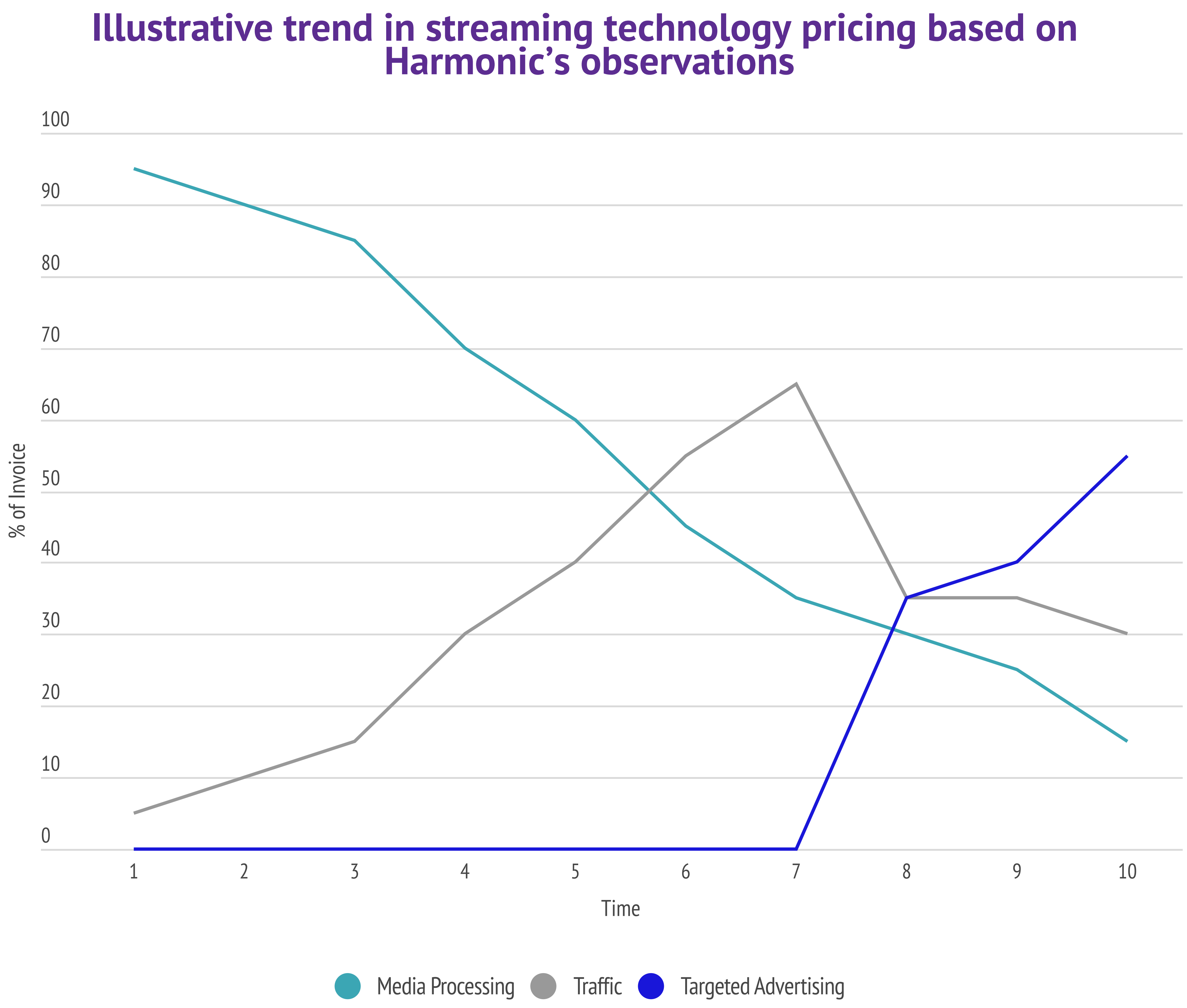
Streaming boom



The chart on this page is only illustrative of Harmonic's observations on streaming technology pricing - i.e., it is based on fictitious data to visualize the conceptual pricing trend. In Shahar Bar's words: "*If a greenfield streaming platform starts out, typically, the first month of invoice will be almost entirely media processing. As they grow, as they get more subscribers, the traffic one [share of the invoice], will start to grow. And at the right time, they may and very likely will introduce targeted advertising, at which point, we will start to see the ad part of the invoice, grow.*" Traffic and targeted advertising are therefore dependent on customer success.

Sources: IABM, Company Filings, , the chart above is illustrative and not based on real data

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Streaming boom

Another example of the variability of streaming economics is provided by CDNs. The stock price of Limelight Networks boomed in the first half of 2020, retreating in the second half when subscriber growth at major streamers such as Netflix slowed down as well - Netflix's subscribers grew by 1% in Q3 2020, from 6% in Q2 2020. Limelight highlighted the effects of volatile streaming patterns on its financials in recent earnings calls, also pointing out the polarized utilization of its networks driven by peak consumption of streaming services. Daniel Boncel, Limelight CFO, said of this at the company's Q2 2021 earnings call: "*Our largely fixed cost structure, coupled with a concentration of large video streaming clients results in the suboptimal network utilization. Our network has a high demand for a relatively short period of 4 to 6 hours each evening in each region. While this remains true, our cash gross margin will have a high sensitivity to overall demand patterns and network utilization.*"

Limelight stock price, 2020-2021

Sources: IABM, Company Filings

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The power of engagement

Limelight's case study really illustrates the deep relationship between consumer habits and technology investment in streaming economic models. Akamai, another CDN service serving the media industry, expanded on this relationship when Edward McGowan, Akamai's CFO, said: "*There's not a direct correlation [of business success] to the number of subscribers per se. Think of it more of like the gym membership. We might have 5,000 people show up at the gym, but only 2,000 go on a regular basis. We make more money off of people that go on a regular basis... So the greater the adoption, the longer engagement times, that's generally beneficial for the CDN providers.*" Even in this case, customer and supplier objectives had never been so aligned. In fact, engagement is a key metric in most media business models, particularly because of its positive relationship with customer retention and advertising rates. With engagement also driving technology revenues in Opex-based modes, there is an important alignment between customer and supplier success. Interestingly, the increasing demand for customer interactivity spurred by the pandemic has been driving media businesses to focus much more significantly on solutions that boost customer engagement. Aside from its relationship with revenue-generating activities such as subscriptions and advertising, media businesses are doubling down on engagement also to drive customer data gathering and differentiate their business models beyond the SVOD and AVOD supremacy.

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The power of engagement

Demand for interactivity has soared

Consumer Interactivity

While supply has never been in a better shape

Social isolation has been driving increasing demand for interactivity

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

The increasing demand for interactivity is reflected by the soaring usage of social platforms such as Twitch and Clubhouse while supply now has many more tools to cater for it compared to years ago.

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Business models beyond SVOD & AVOD

Media businesses operating in the sports sector have been experimenting with interactive experiences built around the convergence between sectors such as media, betting, and gaming in the last few months. Examples of this trend include companies such as Sinclair and Fox, who have been working on gamification and betting. FuboTV perhaps represents the most interesting case study when it comes to this convergence. FuboTV acquired Vigtory, a sports betting and interactive gaming platform, in January 2021, with FuboTV's CEO David Gandler saying of the acquisition: "*We believe online sports wagering is a highly complementary business to our sports-first live TV streaming platform. We believe there is a real flywheel opportunity with streaming video content and interactivity. We not only expect sports wagering to become a new line of business and source of revenue, but we also expect that it will increase user engagement on FuboTV resulting in higher ad monetization, better subscriber retention, and reduced subscriber acquisition costs.*" This illustrates the interplay between interactivity and monetization. At the Needham & Co. Technology & Media Conference in May 2021, FuboTV's CEO added: "*We are very focused on our ability to manage our data and to analyze and leverage that data in ways that will allow us to find new opportunities... Adding wagering, I'm looking for things we can sell that can add $10 to $15 to $20 of monthly revenue per customer.*"

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Business models beyond SVOD & AVOD

This illustrates the potential business model differentiation driven by interactivity, which is built on data and in itself represents a tool to drive more data gathering. This differentiation consists of an interplay between personalization and interactivity that can drive increasing transactional revenues for media businesses, beyond their SVOD and AVOD funding sources. In live events, this seems to be quite a compelling model, as evidenced by the moves of media businesses in this area. Moreover, some initiatives have focused on providing live interactive experiences at a premium. However, it should be noted that gamification can go well beyond live content as well. Netflix hired former Facebook and EA executive Mike Verdu as VP of game development in July 2021. Reportedly, this move aims to develop a gaming offering as part of Netflix's subscription packages, though the company may also rely on gamification to drive other elements of its platform, like content and user experience, as it did with the movie Bandersnatch in 2018. Coming back to live, some initiatives have focused on providing live interactive experiences at a premium. Eluvio LIVE priced the 4K Stream + Virtual Meet & Greet package for the Black Eyed Peas concert at $80, which was $50 greater than the 4K Stream only. Eluvio LIVE also offers "*dynamic advertising and personalized merchandising initiatives, including interactive points on-screen that allow users to click 'hot-spots' to buy during the event*," which really underscores the emergence of transactional models in the media industry.

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Micro commerce

Eluvio LIVE also offers "remonetizing" opportunities, some of which are based on non-fungible tokens (NFTs), to make more effective use of content assets as well as tailor packages to specific users. This is again consistent with a push for more personalized experiences but also with the need to better leverage content archives, a business driver triggered by the pandemic, as evidenced in previous IABM research. Moreover, from a monetization perspective, this is also consistent with a new transition to microtransactions, allowing consumers to pay for relevant sub-segments of a larger piece of content. Something similar is happening on the B2B front when it comes to content syndication. Eluvio LIVE also offers the ability to repurpose content snippets for syndication. Technology supplier Newsbridge offers a "Clip & Collect" tool as part of its monetization solution, allowing users to "*select a specific sequence, then add it to their cart.*" Search for specific elements is enabled by an AI-based search engine. This is an interesting example of how even B2B business models are being personalized. This trend is also consistent with the emergence of content marketplaces such as Vuulr. Vuulr raised $3.5m at the end of 2020, up from $2.5m in 2019. Vuulr is a global digital platform for trading content rights, applying a 10% commission on sellers' prices for content assets. In a press release at the end of 2020, the company said that buyers had quadrupled since its launch in January 2020.

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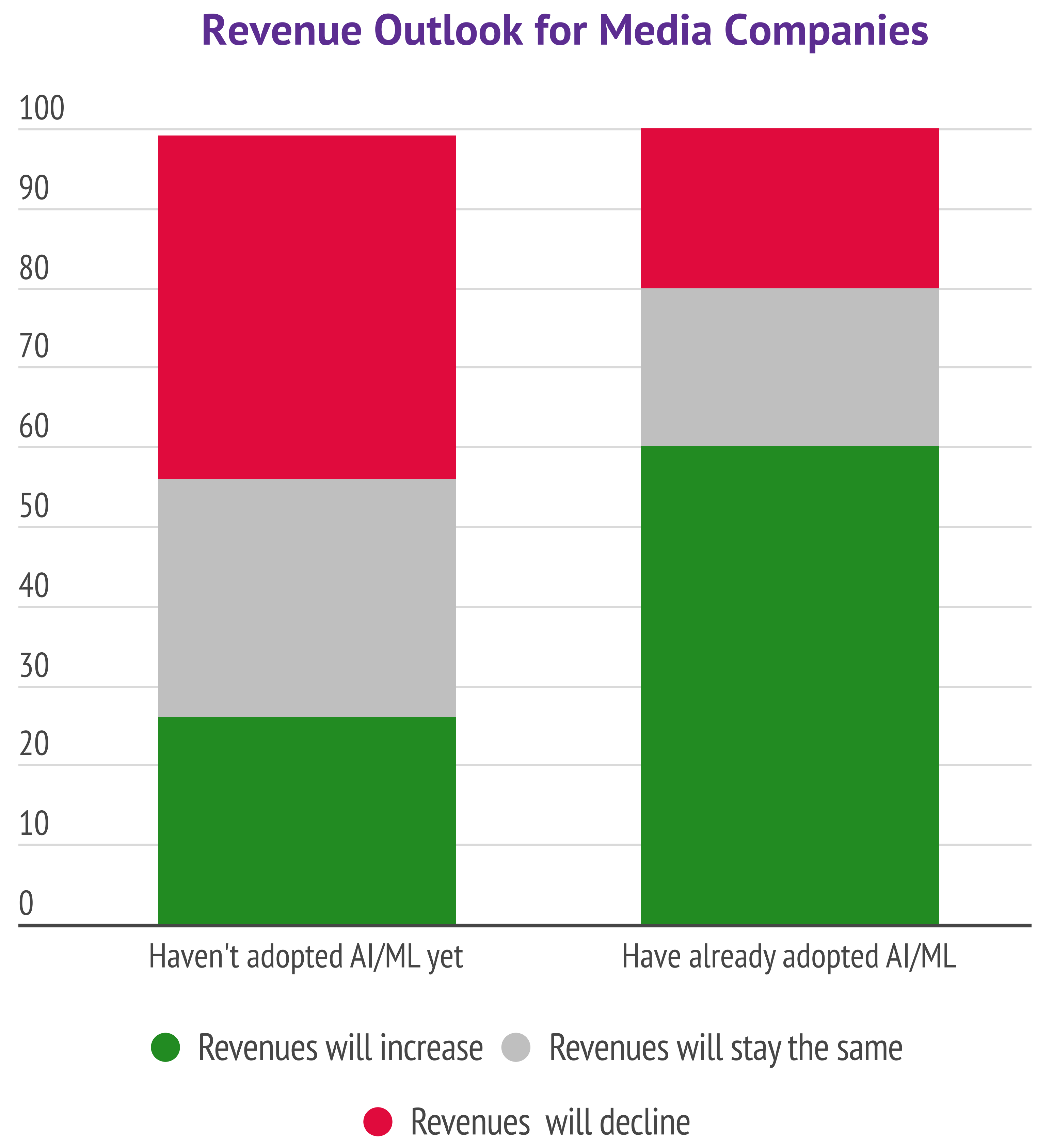
SVOD and AVOD hinge on data too

Dominant streaming business models such as SVOD and AVOD hinge on data capabilities too. Data analytics is in fact the fastest-growing activity in Consume and Monetize according to IABM research. IABM research has also reported that media companies that have invested in AI/ML technology are more likely to have a positive revenue outlook and technology budget forecast. Data-driven technologies in this area include analytics for subscriber intelligence and management as well as advertising intelligence and targeting. Media companies have repeatedly told IABM that these areas are in continuous development and are attracting a significant portion of their media technology budgets. Due to the strategic importance of these activities, they are however also vulnerable to insourcing initiatives - ad tech in particular.



Sources: IABM

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SVOD still reigns in a fragmented landscape

According to a 2021 PwC survey polling US consumers, 62% of their time in 2020 was spent watching SVOD services compared to 32% spent on AVOD offerings. The most important streaming services remain SVOD offerings with ad-free experiences (and the best/most expensive content), despite the launch of several AVOD initiatives between 2020 and 2021. Despite the dominance of SVOD, AVOD offerings are expected to grow in the next few years. Most importantly, the consumer appetite for aggregation is increasing as more services, including AVOD offerings, enter the media landscape. Unifying these services in a seamless manner has therefore become more important for media companies. This is about managing relationships with direct competitors as well as dealing with a web of technical integrations to deliver optimal consumer experiences. At its Q2 2021, FuboTV's CEO David Gandler said about this: "*We have repeatedly asserted that there will be a major shift back to aggregation and bundling as the proliferation of SVOD services becomes increasingly burdensome and costly for consumers. The industry now echoes this view, recently pointing to consumer fatigue as a consequence of actively managing numerous subscriptions and disparate sources of content. We believe that the delivery of a unified, personalized, and interactive streaming experience is the future of this space.*" We believe that to be the case as well.

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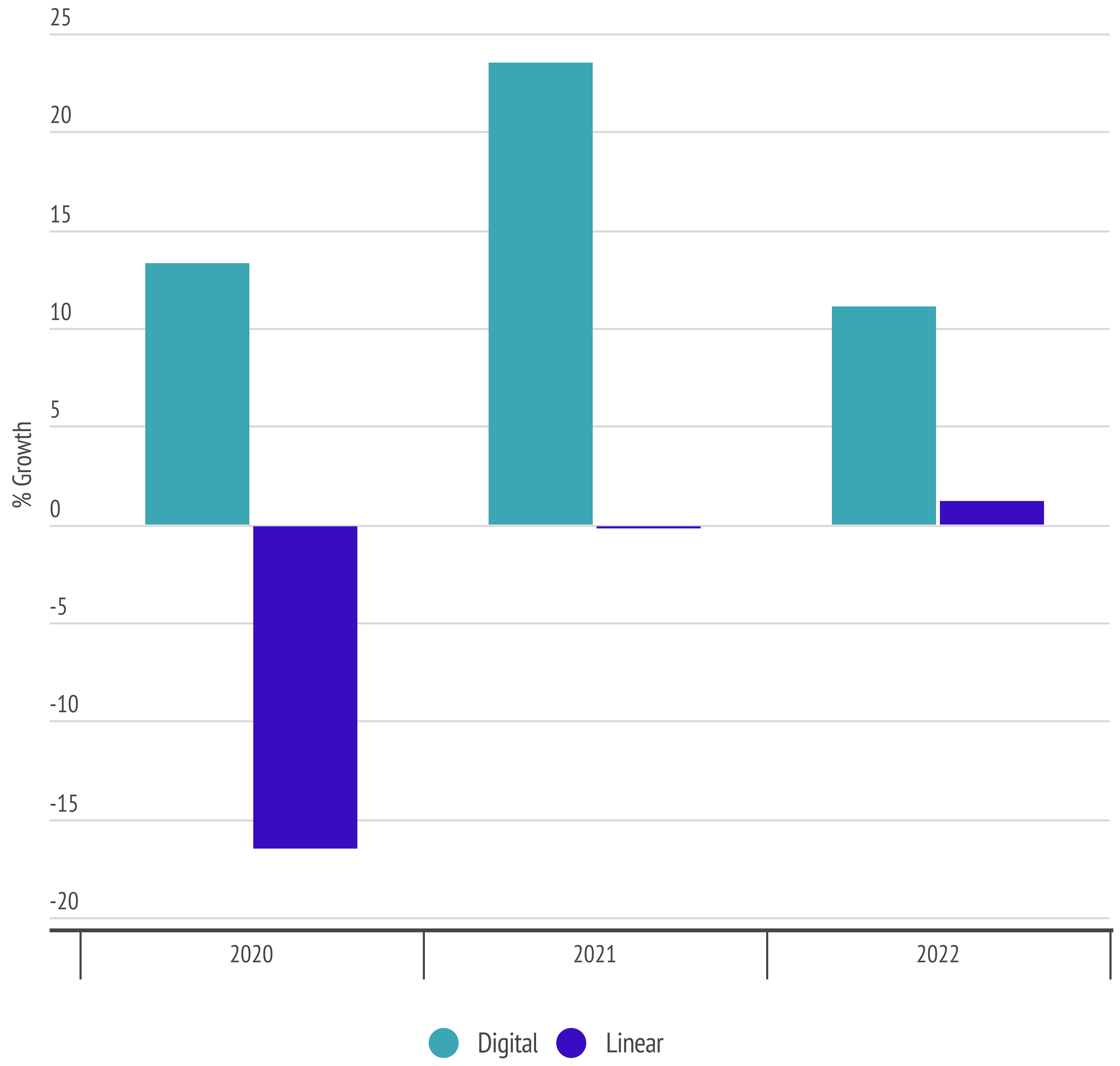
Advertising polarization

Advertising spending was hit by the COVID-19 pandemic in 2020 though it has recovered in 2021. Figures on the US market from Magna though show that this recovery will be much more significant for digital advertising, which is expected to grow by 23.5% in 2021 - digital ads were particularly resilient to the bust cycle of 2020 as well. Interestingly, online video is the fastest-growing digital medium along with social media, which is a testament to the growth of streaming in 2020. Major media businesses such as Disney and ViacomCBS have also reported growth rates of over 100% in their digital advertising division in 2020. The consolidation of commercial players in the fragmented European market (e.g., TF1 and M6) also shows that the future of advertising might be more digital and less linear.

Net Advertising Revenue Growth by Medium in the US



Sources: Magna

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Hybrid business models

Despite the diverging fortunes of linear and digital advertising, most media companies regard cross-selling across linear and digital distribution channels as their differentiating factor, particularly when it comes to differentiating themselves from digital advertising giants such as Google and Facebook. This is very much a hybrid model as described in RTL's investor presentation in June 2021: "*Combine the value of TV and digital advertising*." The company's strategy on this consists of blending the data-driven nature of digital with the mass reach of linear, which can deliver premium pricing over transactional digital platforms. This is consistent with what's happening at other major media companies. In early 2021, Disney unveiled its new Disney Real-Time Ad Exchange (DRAX) platform to enable a "*cross-platform approach to sell its ad inventory on traditional linear TV and increasingly crucial streaming platforms like Hulu*." As previously reported by IABM, the focus on hybrid not only affects advertising but also other aspects of media business models. In an interview with IABM, Globo's Head of Architecture & Analytics, Carlos Octavio, also talked about his company's intention to deliver hybrid TV experiences, blending linear and on-demand experiences more seamlessly. We could also argue that media companies' attempt to move beyond SVOD and AVOD models is also consistent with the push towards hybrid business models for differentiation.