A Paradigm Shift: Embracing Remote Production Workflow in the Era of Multiscreen TV and Video

Today's premium content owners need a scalable and profitable live production ecosystem.
Summary

Catalyst

As four primary technology enablers evolve – the internet, smartphones, cloud, and the Internet of Things (IoT) – premium content owners are embarking on large-scale media transformation journeys to strengthen their market share using a core growth strategy: multiscreen TV and video first. Content owners are also differentiating their offerings as television audiences continue to fragment and digital-born platforms increase competitive pressure, through the “live, local” (“2L”) content approach. As they increase their investments in niche live content repositories in order to grow lifetime audience engagement rates, premium content owners must embrace the IP content supply chain, which lies at the center of their transformation roadmap.

In Ovum’s ICT Enterprise Insights 2018/19 survey, one in seven (13%) premium media asset owners was found to have already invested in a transformation project to move one or more content supply chain workflows to IP in the last year. Media contribution, preparation, and distribution are highly capital intensive for producers of live TV and video content, and their workflows are complex. Migration to IP provides owners with new opportunities – such as remote production – to simplify workflows and lower the total cost of ownership (TCO).

Key messages

- Only 2% of content owners globally have fully deployed time-bound remote production workflow projects, although 16% are planning to do so in the next 12 months.
- Owners in North America and Western Europe are early adopters. The Middle East and Latin America will be the fastest-growing emerging markets in 2019.
- The three core drivers of migration to IP are: expanding market reach; exploiting new monetization avenues; and safeguarding profitability by reducing broadcast operations, engineering, and general and administrative (G&A) expenses.
- The essential functionalities for vendors in this space include robust managed monitoring, disaster recovery (redundant backup), and predictive analytics services.

Business outlook

Investments in time-bound projects are on the rise

Core content owners’ priorities are to enhance single media asset reach, exploit new monetization avenues, and lower live production workflow TCO

Over the past two years, tier-1 and tier-2 premium content owners have accelerated their spending on niche time-bound project repositories (for 2L content) to safeguard their competitive position. Their average content costs as a proportion of opex have therefore increased by a compound annual growth rate (CAGR) of 2.4% between 2015 and 2018, from 48.4% to 52.2%. For most, profitability has also been significantly hampered: net margins have dropped by 8% since 2015, although they remain strong, at an average of 15.1% (see Figure 1). Investments in time-bound projects have been
essential for traditional premium content owners to maintain their market share and lower churn in the face of competition from digital-born enterprises, as the latter increase their spending on 2L assets; DAZN, for example, has earmarked US$2.5bn for content acquisition in 2019. Time-bound projects will continue to shift these enterprises' business priorities over the next 18 months.

**Figure 1: Selected premium content owners' profitability (net margins), 2015–18**

Source: Ovum
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Figure 2: Selected premium content owners' 2L content acquisition costs as a percentage of opex, 2015–18

![Content cost as a percentage of opex](image)

Source: Ovum

Table 1: Selected significant 2L investments

<table>
<thead>
<tr>
<th>Channel 4</th>
<th>Champions League, F1 (partial rights purchase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21st Century Fox</td>
<td>Copa Libertadores, MLB, FIFA World Cup, MLS, NFL, NASCAR</td>
</tr>
<tr>
<td>Bertelsmann</td>
<td>FIFA, UEFA Champions League, Boxing (Vladimir Klitschko), Men's Handball, World Rally</td>
</tr>
<tr>
<td>Discovery</td>
<td>Ryder Cup, Cycling, Poker sports</td>
</tr>
<tr>
<td>Star India</td>
<td>IPL, Indian national cricket team, Rio Olympics 2016</td>
</tr>
<tr>
<td>Sky</td>
<td>English Premier League, Bundesliga, Italia Serie A, IPL</td>
</tr>
<tr>
<td>Grupo Globo</td>
<td>Olympics, Brasileirao Serie A and Serie B</td>
</tr>
<tr>
<td>Fuji</td>
<td>Nippon Baseball, Boxing (Akira Yaegashi), Bundesliga, Judo, Horse racing</td>
</tr>
<tr>
<td>Digital-born enterprises</td>
<td>DAZN (German college basketball, NBA), Amazon (English Premier League), Facebook (MLB, La Liga), Twitter (NFL)</td>
</tr>
</tbody>
</table>

Source: Ovum

Ovum's ICT Enterprise Insights 2018/19 survey revealed that for 39% of premium content owners, the top three business priorities over the next 18 months are the reduction of live production workflow TCO, the lowering of overhead expenses, and the exploitation of new monetization avenues (see Figure 3). As these enterprises expand their footprint in multiple local markets to enhance their premium content repositories, such as for K-12 sports, the traditional live production workflow will be inefficient and costly and offer lower return on investment (ROI) in single media assets – which will lower long-term profitability. Leveraging an IP-based remote production workflow is an essential strategy to meet these changing business requirements – to cost-effectively prepare and distribute multiscreen premium content and, in turn, increase average revenue per user (ARPU).
Global adoption of remote production is slow but steady

Live content enrichment and the expansion of reach at optimal cost are core value propositions for remote workflow adoption

Market pressures are increasing the need for content owners to build niche (2L) premium content repositories at lower cost, so that they can simultaneously improve their operating margins and enhance their digital user lifetime engagement rates. The traditional live production workflow – encompassing legacy outside broadcasting (OB) vans, technical human capital, and on-site facilities – is inefficient, lacks cost-effective real-time work group collaboration, and has higher set-up configuration costs. Customer acquisition strategies for most premium content owners are woven around a "horizontally diversified volumetric approach" – that is, increasing multifaceted content production with only incremental increases in human capital costs. Their shift of focus to multidimensional content enrichment, monetization, and reach will be a pivotal factor in their adoption of remote production workflows in the years ahead.

Ovum's ICT Enterprise Insights 2018/19 survey found that only 2% of premium content owners have a fully deployed a remote production workflow for their time-bound projects (see Figure 4). North American respondents lead, but around 10% of respondents in Latin America and the Middle East and Africa are planning to invest in remote production workflows in the next year. Western Europe
and Asia-Pacific are estimated to follow a similar adoption trajectory, with 12–14% of respondents planning to embrace a remote production workflow by 2019 (see Figure 4).

**Figure 4: Premium content owners’ remote production workflow deployment plans globally and by region, 2018–20**

<table>
<thead>
<tr>
<th>Region</th>
<th>Fully deployed</th>
<th>Plan to in 6–12 months</th>
<th>Plan to in 12–24 months</th>
<th>Plan to in more than 24 months</th>
<th>No plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East &amp; Africa</td>
<td>11%</td>
<td>23%</td>
<td>56%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Latin America</td>
<td>10%</td>
<td>39%</td>
<td>41%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>1%</td>
<td>23%</td>
<td>41%</td>
<td>21%</td>
<td>0%</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>19%</td>
<td>52%</td>
<td>29%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Western Europe</td>
<td>2%</td>
<td>35%</td>
<td>42%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>North America</td>
<td>4%</td>
<td>16%</td>
<td>28%</td>
<td>37%</td>
<td>15%</td>
</tr>
<tr>
<td>Global</td>
<td>2%</td>
<td>16%</td>
<td>28%</td>
<td>43%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: Ovum's ICT Enterprise Insights 2018/19 survey, n=127 (October 2018)

Almost 5% of tier-2 premium content owners surveyed report that they have fully migrated from a local/on-site or hybrid (a combination of local/on-site and remote) production workflow to pure-play remote – a higher proportion than tier-1 or tier-3 respondents (3% and 1%, respectively). Tier-2 enterprises' higher migration rates are predominantly due to

- their core business focus on lowering resource expenses along with the production of higher niche local content repositories
- their need to aggregate 2L content repositories from multiple geographies and expand single media assets in real time to exploit new monetization avenues.

These requirements have accelerated their remote production workflow adoption, allowing them

- faster time to market: a plug-and-play remote production portfolio, which includes compression codecs, tightly embedded remote-control GUI, advanced audio plug-ins, and video editing and repurposing solutions
- contextual bandwidth TCO reduction: a remote production multidimensional connectivity portfolio, such as fiber with satellite backup, public or open IP with cellular backup, and a rental option, offers cost-effective scale, audience engagement, and ROI on an event-by-event basis.

Ovum's survey highlights that the adoption of remote production workflows will accelerate in the next year, predominantly driven by tier-4 and tier-1 premium content owners (45% and 25%, respectively,
plan to deploy in the next 6–12 months) (see Figure 5). This slightly slower adoption curve is primarily attributed to

- poor interoperability on remote infrastructure
- the lack of IP standardization, especially in the production workflow
- the large volume of data transfer to longer distances, and a non-zero-latency issue at handover points.

![Figure 5: Premium content owners' remote production workflow deployment plans by tier, 2018–20](source)

Remote production migration roadmap

2020 will see a shift to mainstream adoption across major markets

Incremental value lies not only in TCO reduction, but also in delivering premium QoS and QoE in the long term

Remote production workflow adoption is currently at nascent stage, with most premium content owners deploying these solutions for standalone large-scale live events, such as the FIFA World Cup, the Olympics, or the English Premier League season. A hybrid model approach – leveraging both local/on-site and remote production workflows – will persist, due to content owners' zero-risk tolerance of failure with their time-bound projects. Ovum believes that sports events will be a primary driver for premium content owners' investment in local time-bound repositories, followed by profitability and
premium quality of service (QoS)/quality of experience (QoE). Two example use cases highlighting increasing demand for remote production over the past six months are:

- One of the leading TV content aggregators in the US leveraged remote production for the FIFA World Cup 2018 to lower their TCO by nearly 30%.
- One of the largest sports TV content aggregators in India used remote production for the VIVO Pro Kabaddi League 2018 season not only to reduce TCO, but to also distribute highly localized content at scale.

In the next 12–18 months, as penetration of IP infrastructure across the content supply chain (including production) rises, we will see a variety of new business value propositions in remote production (see Table 2).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Incremental business value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decentralization of production facilities</td>
<td>Lower TCO</td>
</tr>
<tr>
<td>Workflow orchestration of network equipment and contribution to distribution workflows</td>
<td>Faster time to market for new monetization avenues</td>
</tr>
<tr>
<td>IP-based compression, monitoring, and signal protection processing</td>
<td>Economies of scale (scalability)</td>
</tr>
<tr>
<td>IP based real-time workgroup collaboration, project management, production asset management (PAM), and editing</td>
<td>Expansion of single media asset volume and ROI</td>
</tr>
<tr>
<td>Lower initial setup and configuration lead time with negligible technical capital but abundance of creative human capital with on-site presence</td>
<td>Optimized resource scheduling, multifaceted versions of single media assets enabling exploitation of new monetization avenues, and human capital cost synergies</td>
</tr>
<tr>
<td>Agile preparation switching, and mixing plug-in for multi-event file, audio assets</td>
<td>Expansion of tier-II, and tier-III content repositories without additional tangible costs, and overheads on real-time basis</td>
</tr>
<tr>
<td>Unified production workflow for both local and remote</td>
<td>Safeguarding profitability</td>
</tr>
</tbody>
</table>

Source: Ovum
Key findings and recommendations

Traditional workflows are insufficient to compete in today’s market

Creating a unique 2L-content-based premium QoE differentiation strategy is a necessity for content owners in today’s highly competitive and fragmented multiscreen TV and video services business. The expansion of 2L content repositories is highly complex and capital intensive, and the traditional live preparation workflow is inefficient due to its poor cost synergies and lack of on-site technical resources for each event. K-12 cricket tournaments, for instance, lack scalability and need cost-effective workflows to safeguard profitability without compromising premium QoE.

Recommendations for content owners

Vendor and remote production capabilities checklist

As most content owners will see content costs increase as a percentage of opex over the next three years, they must embrace IP-based workflows, including remote production, to both lower operational costs and safeguard profitability margins. Content owners must migrate end-to-end time-bound projects (both large and seasonal 2L events) to remote production workflows and select technology partners that offer

- assistance in wider media transformation projects, with remote production as an integral part rather than a siloed initiative
- higher conversion rates from proof of concept to pilot and beta testing to live deployment
- strong tier-1 and tier-2 customers across multiple geographies, along with a robust, horizontally integrated IP partner portfolio (from media contribution, preparation, and distribution to engagement)
- high customer retention rates (more than 95%), with real-time monitoring, disaster recovery (redundant backup), workflow orchestration, and predictive analytics services as core functionalities
- multidimensional aims, not limited to lowering TCO but also including improving single media asset reach and ROI and exploiting new monetization avenues
- vertically integrated local and regional hotspots and points of presence (POPs) dispersed globally
- service-level-agreement- (SLA-) based managed unified production workflow
- multifaceted signal path protection capabilities
- multi-video format support (SD, HD, UHD, 4K/8K)
- support of newer standards such as AES-67 WAN transport, SMPTE 2110, and SMPTE 2022-6
- prebundled hotspots along with compression codecs, tightly embedded remote-control GUI, advanced audio plugins, and video editing and repurposing solutions
- pricing flexibility per hour, channel, event, and region
Agile unified control room for concurrent multiple event formats from tier-II to tier-III enabling real-time switching functionality for re-purposing of live assets (audio mixing, replay)

broadcast network and security operations center as a backbone to lower business continuity risks during vital time-bound projects.

Appendix

Scope of paper

Tata Communications commissioned Ovum to develop and conduct a top-level sentiment and viewpoint survey on remote production workflows in March 2019. Ovum utilized internal data sources and intelligence (including Ovum’s ICT Enterprise Insights 2018/19 survey; revenue, capex and opex trackers; and briefings at IBC and NAB) to assess TV and video market trends for time-bound projects including sports; the top business priorities of premium content owners; and the adoption curve and migration roadmap for remote production in the next 12–24 months across broadcast TV and video, digital services, internet TV and video services, sports franchises, film entertainment, and social network markets worldwide. The research also encompassed the current status of remote production on a regional basis, highlighting some of the crucial use cases for TCO reduction across the live production workflow. This paper aims to examine the most common questions pertaining to the core value and ROI of remote production for premium content owners, to accelerate their "content anywhere, everywhere" strategies.

Definition

- The premium content owners segment includes broadcast TV and video providers, digital service providers (cable TV, satellite TV, and telco–OTT), internet TV & video streaming service providers, film entertainment (post production) providers, sports franchise owners, and social networks investing in time-bound projects such as sports and live events.
- Digital-born enterprises include YuppTV, DAZN, Facebook, Twitter, Netflix, Hulu, and Amazon.
- Content costs include third-party rights acquisition costs and programming expenses.

Further reading

2019 Trends to Watch: Media and Broadcast Technology, SPT004-000029 (December 2018)
"Five key trends from IBC 2018," SPT004-000023 (September 2018)
2018 ICT Enterprise Insights in the Media and Broadcast Industry, SPT004-000003 (January 2018)

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We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Ovum’s consulting team may be able to help you. For more information about Ovum’s consulting capabilities, please contact us directly at consulting@ovum.com.

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