EXECUTIVE SUMMARY

Delivering OTT video continues to become more complex as OTT content providers optimize services to meet business objectives where scale, reach, reliability, and quality of experience are essential elements for the successful deployment of any service. In addition, the use of data and analytics to personalize recommendations, drive targeted advertising, and optimize content and licensing strategies to engage and monetize audiences across the ever-growing list of consumer devices is just as important.

That is why OTT providers need technology solutions that support robust service deployment while allowing for continuous optimization of the user experience. They have a wide array of vendors to evaluate, ranging from those that offer point solutions to those that offer end-to-end multiscreen TV platforms.

This white paper analyzes the costs and benefits associated with the Adobe Primetime platform based on in-depth interviews with five programmers that use Primetime to support their delivery of premium video content. IDC’s study revealed that since implementing Primetime, the surveyed programmers have increased their average viewer engagement time and are enriching the experience of their viewers by providing higher-quality content and more personalized viewing experiences.

As a result, they have witnessed a considerable increase in the number of viewers as well as subscription and advertisement revenue. From an operations perspective, they have accelerated the time to market for OTT video services, increased developer and broadcast operations staff productivity, and reduced the reliance on IT staff.

Business Value Highlights

- 385% five-year ROI
- 10-month payback period
- $122K average annual benefits per 100,000 viewers
- 12% average increase in the number of viewers
- 24% increase in the average viewer engagement time
- 59% less developer time required to deliver OTT video services
IDC projects that over a five-year period, on average, the total benefits realized are equivalent to $122K per year per 100,000 viewers ($4.5M per programmer), which would equate to a five-year return on investment (ROI) of 385%. Highlights of the benefits attained by these programmers include:

» 12% average increase in the number of viewers

» $1.2M increase in annual subscription-based revenue and $2.4M increase in advertising revenue recognized in this study

» 24% improvement in the average viewer engagement time

» 59% reduction in developer time required to deliver OTT video services to viewers

» 50% reduction in IT staff time required to support digital rights management (DRM)

» 71% reduction in IT staff time to support authentication

Overview of Adobe Primetime

Adobe Primetime is a robust portfolio of key video-enabling technologies. Consistent with Adobe’s stated goal of “making every screen a TV,” the Adobe Primetime platform enables video experiences across VOD, live, and linear services on a wide range of consumer devices.

Adobe Primetime has five core elements*:

» **Player SDK.** Adobe Primetime TVSDK is a video player toolkit for the playback of adaptive bitrate HLS and MPEG-DASH video streams on a wide array of consumer devices. TVSDK supports an extensive feature set including multi-DRM, dynamic ad insertion, HTML5, multiple audio tracks, ID3, DVR experiences, and rich analytics.

» **Authentication.** Formerly known as Adobe Pass, Adobe Primetime authentication gives programmers a seamless way to grant access to pay TV content from their PCs, smartphones, tablets, game consoles, and other devices based on consumers’ pay TV subscription plans. It offers multiscreen support, single log-in across multiple applications, and auto log-in to reduce the friction for consumers accessing TV content they already pay for.

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* In addition to the five elements highlighted in this study, Adobe Primetime Recommendations and Adobe TV Media Management products are a part of the Primetime suite but had not launched at the time of the interviews.
» **Concurrency monitoring.** Adobe Primetime concurrency monitoring enables broadcasters, cable networks, and distributors to identify and reduce unauthorized account sharing. Concurrency monitoring can be used to enforce usage rules to prevent revenue loss because of fraudulent behavior and promote revenue gain through monetization of additional authorized streams.

» **Ad insertion.** Adobe Primetime ad insertion enables both client-side and server-side dynamic ad insertion into live, linear, and VOD content, enabling seamless ad experiences that improve monetization. Adobe Primetime ad insertion supports third-party ad servers with support for traditional ad breaks, real-time markers, and CMS-driven ad timelines. IAB-compliant ad impression and tracking beacons provide visibility into ad performance via reports and forecast tools.

» **Multi-DRM.** Adobe Primetime DRM, powered by ExpressPlay, enables the utilization of multiple DRM systems to protect content across a wide range of consumer devices, many of which require the use of their native DRM system. Adobe Primetime DRM offers a single platform for content protection across all devices for scalability and maximum reach.

Adobe Primetime is part of a broader portfolio of technologies within the Adobe Marketing Cloud that are relevant to content providers. Adobe Analytics, Adobe Target, and Adobe Audience Manager provide insights into viewer behavior, enable targeted and personalized user experiences, and enable OTT providers to use viewer data to increase the value of ad inventory. The Adobe Primetime platform is also modular: OTT providers can selectively adopt Adobe Primetime components and integrate them with other solutions to enable the OTT video distribution workflow based on their specific service requirements.

### The Business Value Of Adobe Primetime

#### Study Demographics

IDC interviewed five Adobe customers about their use of Adobe Primetime. The programmers interviewed are of varying sizes and belong to different geographies. The programmers are based in Canada, Brazil, France, and the United States. Four of the surveyed programmers are using Primetime to support their OTT video businesses, and one programmer is using Primetime to support its TV network business.

The study reflects how diverse programmers use Primetime to deliver video services to their viewers. The number of employees for the surveyed programmers ranged from 110 to 5,000, with an average
of 1,460. The total number of viewers supported by the Primetime platform ranged from 310K to 10M, with an average of 3.7M. The surveyed programmers have been using Primetime for an average of four years. The firmographics of the surveyed programmers are highlighted in further detail in Table 1.

TABLE 1

<table>
<thead>
<tr>
<th>Firmographics</th>
<th>Average</th>
<th>Median</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees</td>
<td>1,460</td>
<td>500</td>
<td>110 to 5,000</td>
</tr>
<tr>
<td>Number of employees on the broadcast operations team</td>
<td>60</td>
<td>50</td>
<td>20 to 100</td>
</tr>
</tbody>
</table>
| Months since Adobe Primetime
  implementation                      | 36      | 36     | 19 to 46       |
| Total number of viewers supported
  through Adobe Primetime              | 3.7M    | 1.2M   | 310K to 10M    |
| Regions                              |         |        | North America, Europe, and South America |
| Industries                           |         |        | TV networks, sports, and entertainment |

Source: IDC, 2017

The surveyed programmers are using a variety of Primetime elements, including TVSDK, multi-DRM, ad insertion, and authentication, to support their media services. The programmers provided a number of examples of how they are using these Primetime modules:

» **TVSDK.** One programmer attributed higher viewership levels in part to the improved quality of video services the programmer can now offer through TVSDK:

  - “To the degree that we looked at other options, we found TVSDK to be very performant. It’s fast, robust; [it] rarely crashes and hasn’t been a maintenance hassle for us. It enables us to reliably play video.”

» **Multi-DRM.** One programmer explained that it can now offer attractive premium channels because it is able to take the steps required by the provider to properly authorize whether the viewers have rights to access the content:

  - “The benefit of DRM is that it enables the business that we are pursuing. If we didn’t have DRM, we wouldn’t be able to have this offering. The business wouldn’t allow us to have the content online.”
“Compared to the solution we had before, Adobe Primetime enables a seamless user experience. It’s not like the ad starts playing [and] gets disrupted and then the content starts playing. It’s more of a TV-like experience, transitioning from the ad to the content.”

**Ad insertion.** One programmer highlighted how it is using ad insertion to add preroll video advertising:

- “Compared to the solution we had before, Adobe Primetime enables a seamless user experience. It’s not like the ad starts playing [and] gets disrupted and then the content starts playing. It’s more of a TV-like experience, transitioning from the ad to the content.”

**Authentication.** One programmer providing TVE video services explained how it is able to seamlessly integrate its service with the authentication systems of multiple cable providers rather than having to write custom code for each cable company:

- “If I didn’t have Primetime authentication, then I would have had to create a custom integration to the authentication systems of all these companies. That means undertaking multiple implementations which are completely different from one another. With Primetime, the workflow is a lot simpler and at a cost that is more manageable.”

**Financial Benefit Analysis**

IDC projects that the surveyed programmers on average will achieve benefits equivalent to $4.5M per year over a five-year period, resulting in a five-year ROI of 385%. This equates to $122K per 100,000 viewers.

The surveyed programmers implemented Adobe Primetime because they concluded that they needed to deliver higher-quality and more targeted video services to support their monetization efforts. Primetime is helping the surveyed programmers achieve these objectives, which they are translating into substantial value by better monetizing their video services and delivering these services more efficiently.

IDC has grouped the benefits in the following two categories:

**Business benefits:** The surveyed programmers are capturing more subscription and advertising revenue by growing their viewership levels and better monetizing ad inventory. Business benefits are equivalent to an average of $3.7M per programmer per year over five years and $100K per 100,000 viewers.

**Operations staff productivity benefits (IT and developer staff):** IT staff, the broadcast operations team, and developers are more productive working on the Adobe Primetime platform. Since implementing Primetime, the surveyed programmers require less operational staff time to manage and support video services. Operational staff productivity gains are equivalent to an average of $800K per programmer per year over five years and $22K per 100,000 viewers.

Figure 1 quantifies the average annual benefits realized across all the companies in the study.
Business and Operational Benefits of Adobe Primetime

The surveyed programmers are leveraging Adobe Primetime to deliver higher-quality and more personalized video services to their viewers on more types of devices. This has resulted in an increase in the number of viewers and enhanced monetization models for the surveyed programmers. Meanwhile, from an operational perspective, the productivity of developers and broadcast operations staff has increased, and video services are delivered faster. Further details of benefits accrued by the interviewed programmers are highlighted in the sections that follow.

Business Benefits

Monetizing Video Services Through Viewership Growth

The programmers reported increasing their viewership base by an average of 12% with Adobe Primetime. The interviewed programmers attributed viewership growth for both subscription and ad-supported video services to their use of the Adobe Primetime platform. For survey participants that rely on subscription business models, this growth in viewers has resulted in higher revenue from subscriptions, while other surveyed programmers have benefited from increased revenue from advertisements. Adobe customers cited drivers of increased viewership levels that included higher quality of video services, delivery of more personalized experiences based on an understanding of viewers, and availability of video services on more types of devices.
One programmer explained: “I could say that the roughly 20% increase in the number of viewers we are gaining today is attributable to Primetime. We know that some of our competitors are not able to target all of their audience because they are not using Primetime.”

By expanding their viewership bases, the interviewed programmers are capturing more subscription and advertising revenue. IDC’s analysis shows that the surveyed programmers will increase their subscription-based revenue by an average of $8.3M and their advertisement revenue by $16.2M per year over five years.

Methodology for Evaluating Business Impact

For the purpose of this study, a 15% operating margin has been applied in calculating the revenue recognized for the financial impact on the surveyed programmers. The programmers interviewed for this study have distinct revenue models. While some programmers monetize their content through advertisement revenue, others charge a recurring subscription fee. To present an aggregate analysis of the impact of Adobe Primetime on the revenue of the interviewed programmers, IDC has incorporated a blended revenue model. The average impact on revenue has been computed under the assumption that an interviewed programmer incurs advertisement revenue as well as subscription revenue (see Table 2).

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Business Impact: Additional Revenue with Adobe Primetime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Programmer</td>
</tr>
<tr>
<td>Additional subscription-based revenue per year</td>
<td>$8.3M</td>
</tr>
<tr>
<td>Additional advertising revenue per year</td>
<td>$16.2M</td>
</tr>
<tr>
<td>Total additional revenue per year</td>
<td>$24.5M</td>
</tr>
<tr>
<td>Assumed operating margin</td>
<td>15%</td>
</tr>
<tr>
<td>Total recognized revenue per year (higher operating margin)</td>
<td>$3.7M</td>
</tr>
</tbody>
</table>

Source: IDC, 2017
"We have faster video start times, less buffering on mobile devices, and a higher video resolution delivered to viewers."

**Improved Quality of Video Services and Increase in Viewer Engagement**

*The surveyed programmers have witnessed a 24% improvement in the average duration of viewer engagement (see Table 3).*

Several interviewed programmers reported that they can offer higher-quality video services on the Adobe Primetime platform, thereby improving their viewer experience. One programmer outlined how Primetime has helped: "We have faster video start times, less buffering on mobile devices, and a higher video resolution delivered to viewers."

Another programmer reiterated similar sentiments about the overall impact of Adobe Primetime on the quality of video services: "Adobe Primetime has enabled our organization to provide substantially better-quality and reliable OTT video services. Since implementing Primetime, video start-up times have accelerated by 25–30%. In addition, viewer engagement has increased from a previous average of 12 minutes to 20 minutes per show."

The improvement in customer experience is validated by the increase in viewer engagement time.

**TABLE 3**

<table>
<thead>
<tr>
<th>Impact of Adobe Primetime on Viewer Engagement per Show</th>
<th>Before Adobe Primetime</th>
<th>With Adobe Primetime</th>
<th>Difference</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average period of viewer engagement per show (minutes)</td>
<td>29</td>
<td>36</td>
<td>7</td>
<td>24</td>
</tr>
</tbody>
</table>

*Source: IDC, 2017*

**Empowering Programmers to Gain Insights into Their Viewers**

Adobe Primetime empowers programmers to understand how their viewers watch and engage with content, helping them enrich the customer experience by providing targeted experiences that relate to their viewers. Through the integration of Adobe Primetime with Adobe Analytics, the surveyed programmers have enhanced visibility into the viewer consumption patterns: "It’s giving us more granular detail about exactly what and when people are watching based on the attributes we’re able to attach to our pieces of video. That has been really useful and something that has helped our sales organization and sponsorship. Our diverse network of owners wants to know how certain programs are doing, and we can easily provide them with a variety of information."
Another programmer echoed similar sentiments and specifically highlighted the impact that Primetime has had on evaluating seasonal habits of its customers: “Adobe Primetime [through integration with Adobe Analytics] enhanced visibility into viewer consumption patterns. For example, it helped us determine drop-off rates of users: If a user is watching something and drops off quickly, they obviously did not enjoy the video. In addition, there is a bit of a seasonality with our business, and it has given us visibility into the seasonal habits of users. Adobe Primetime helps us understand how video services are resonating with viewers and helps us measure engagement.”

**Operational Benefits**

The interviewed programmers reported that their broadcast operations, developer, and IT teams, which are central to the delivery of high-quality video services, are more effective and productive working with the Adobe Primetime platform.

**Optimized Workflow for Broadcast Operations**

*Since leveraging Primetime to deliver video services, broadcast operations staff have experienced on average a 10% increase in their productivity.*

The increase in productivity can be partially attributed to Primetime’s TVSDK, simplifying the transcoding process to develop content for various devices: “The main impact is on the transcoding workflow. Before using Primetime, we had to transcode to prepare the content for each device we wanted to target. With Primetime, we had to prepare the content once and not multiple times. We are now able to reduce our operations and can handle more platforms with the same architecture and infrastructure that we had in the past.”

**Increase in Developer Productivity**

*The developer time required to deliver an OTT video service to viewers declined by an average of 59% with Primetime (see Table 4).*

Simplified workflows, ease of customization, and the ability to seamlessly develop video services for multiple devices have translated into an increase in the productivity of developers within the surveyed programmers: “I was discussing this with one of my competitors, and they told me that they needed one year with two developers in order to develop their own video service. I think that this is something that’s very important for us. It’s being able to bring very important and relevant features to users within days or weeks instead of spending months or years.”
“Everybody is using their phones all the time, so the mobile audience is starting to surpass the web audience. Adobe Primetime has helped us to retain viewers and acquire more viewers.”

**Offering Video Services on More Devices**

Adobe Primetime has also enabled the surveyed programmers to seamlessly provide better-quality video experiences on a variety of devices, including TVs, mobile devices, and OTT devices: “Adobe Primetime is handling the complexity of various devices that are available today on the OTT market. We don’t have to manage the QA testing. We don’t have to manage the hundreds of new devices that are coming every year into the market. Adobe handles that. Our service is definitely better in terms of quality.”

Another programmer explained that Adobe Primetime was helping it support playback on Android devices and the importance of this to its business: “Everybody is using their phones all the time, so the mobile audience is starting to surpass the web audience. Adobe Primetime has helped us to retain viewers and acquire more viewers.”

**IT Staff Productivity Benefits**

The interviewed programmers attained considerable benefits among their IT staff responsible for supporting the delivery of video services on the Adobe Primetime platform. Since implementing Primetime, the time spent by IT staff on digital rights management has dropped by 50% and the time spent on authentication has declined by 71% (see Figure 2).

As one programmer noted: “Our IT staff spend less time on authentication because the Primetime authentication service is reliable and intuitive. For example, Adobe does a great job in managing upgrades and releases.”

**TABLE 4**

<table>
<thead>
<tr>
<th>Impact of Adobe Primetime on Developer Productivity</th>
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</thead>
<tbody>
<tr>
<td>Before Adobe Primetime</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Average developer time required to deliver video services (days) — per OTT video service</td>
</tr>
</tbody>
</table>

Source: IDC, 2017
ROI Analysis

IDC uses a three-step methodology for conducting ROI analysis:

» Gather quantitative benefit information during the interviews using a before-and-after assessment. In this study, the benefits studied were centered on an increase in the number of viewers and revenue. In addition, IDC studied the increase in productivity attained by developers, broadcast operations, and IT staff.

» Create a complete investment (five-year total cost analysis) profile based on the interviews. Investments go beyond just the solution’s hardware and software. IT staff spent time installing and configuring the new solution, removing old equipment and/or software, and maintaining the new solution. Ancillary costs directly related to the solution, such as planning, outsourced installation, configuration, maintenance, IT staff required, and user training, are also included in the analysis.

» Calculate the ROI and payback period. IDC conducts a depreciated cash flow analysis of the benefits and investments over a five-year period.

Because the full benefits of the solution are not available during the deployment period, IDC prorates the benefits on a monthly basis and subtracts the appropriate amount for the deployment time from the first-year savings.
IDC uses a discounted cash flow methodology to calculate the ROI and payback period. ROI is the ratio of the net present value (NPV) of the net benefits and the discounted investment. Payback period is the point at which cumulative benefits equal the initial investment. IDC uses a standard 12% discount factor (allows for risk and the missed opportunity cost that could have been realized using that capital).

**IDC’s five-year ROI analysis shows that the programmers surveyed in this study will spend $2.9M deploying and maintaining Adobe Primetime over five years and can expect to achieve $14.3M in benefits for an NPV of $11.4M. This would result in a five-year ROI of 385% and a payback period of 10 months (see Table 5).**

**TABLE 5**

<table>
<thead>
<tr>
<th>Average per Programmer</th>
<th>Average per 100,000 Viewers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit (discounted)</td>
<td>$14.3M</td>
</tr>
<tr>
<td>Investment (discounted)</td>
<td>$2.9M</td>
</tr>
<tr>
<td>Net present value (NPV)</td>
<td>$11.4M</td>
</tr>
<tr>
<td>Return on investment (ROI)</td>
<td>385%</td>
</tr>
<tr>
<td>Payback period</td>
<td>10 months</td>
</tr>
<tr>
<td>Discount factor</td>
<td>12%</td>
</tr>
</tbody>
</table>

*Source: IDC, 2017*

**Challenges/Opportunities**

**Challenges**

To succeed and grow revenue, OTT technology vendors such as Adobe must persuade programmers and service providers to choose a “best of breed” commercially available platform over an internally developed custom solution. DIY continues to be a temptation for these buyers; they often underestimate the downstream costs of maintaining a custom solution — in both hard-dollar spend and opportunity cost if they are unable to keep up with the latest innovations in consumer devices, streaming formats, protection standards, playback, and data science for refined analytics and targeting.
In addition, OTT technology vendors must counter the competitive threat from managed video service providers. Outsourcing workflow and service management has proven to be an attractive option for sports programmers and midmarket OTT providers. OTT technology vendors must present a clear value proposition that emphasizes “best of breed” technology integration and vendor choice and highlights the benefits to programmers and service providers of having control over and visibility into their technology stack and service.

Adobe will continue to compete with OTT technology providers that sell “end to end” platforms as a means to reduce complexity.

**Opportunities**

OTT video consumption continues to grow at a rapid pace, and innovative technology vendors should fare well as both viewers and advertisers flock to OTT services. OTT technology vendors such as Adobe are well positioned to be trusted advisors to programmers and service providers, applying the knowledge and expertise they acquire from working with many customers to better serve all customers. They have an understanding of future service and technology roadmaps and are deeply involved with industry standards groups to stay ahead of the trends. Their ability to integrate their solutions with those of third-party vendors from the extended video ecosystem should enable them to anticipate and respond to new requirements and help them win and protect business.

Adobe can also leverage its success to help drive the evolution of OTT video services. TVE and SVOD OTT services including OTT pay TV services, direct-to-consumer offerings, and live content distribution will fuel opportunities for growth in coming years.

Finally, video technology platforms that can help enable the next generation of personalized user experiences by harnessing data and feeding data back into recommendations, advertising, and other aspects of the user experience will enjoy an important competitive advantage as OTT providers seek to grow their reach, relevancy, and revenue.

**Conclusion**

Programmers and operators in the media, entertainment, and television industries looking to grow their audiences with their content, optimize their revenue streams, and achieve staff efficiencies for the development and delivery of video services should consider Adobe Primetime. Since deploying Primetime, programmers have increased their viewership rates by improving the quality of video services, analyzing viewer consumption patterns, and delivering personalized experiences to their viewers. IDC’s study has discovered that
programmers have attained these business benefits while significantly accelerating time to market and increasing the productivity of staff involved in the development, management, and delivery of video services.