

VOLUME 1, NO. 7

OF A SERIES OF BUYER'S GUIDES TO PRODUCTS AND SERVICES

NOVEMBER/
DECEMBER
2014

THE SUPERGUIDE TO CASHING IN- VIDEO MONETIZATION DRM AND SYNDICATION



PLATINUM SPONSOR



Money From Video: An Old Dog Learns a New Trick

In October, when we covered HBO's announcement that it would be launching an online-only streaming service, I got into an interesting debate with one of our writers. He argued that this signaled the tipping point of how video content was being consumed and said that traditional broadcast was all but swinging from a rope. I believe there's something else at play. Take the latest Nielsen cross-platform report, "Shifts in Viewing," from September 2014 (go2sm.com/crossplatform). It shows that the abandonment of traditional TV isn't as dramatic as our writer seems to think. The stat I see quoted most frequently is that "traditional TV viewing among 18-24-year-olds in Q2 2014 was down by 11.7% year-over-year." My point is that while there may be gold in them thar hills, there is still a considerable crevasse between the demand and the supply. While there's clearly plenty of demand, there's a shortage of supply. Why? Simple: Poor business models when it comes to monetization of online content.

HBO's announcement doesn't signal an abandonment or cannibalization of its traditional broadcast revenue streams. Rather, it's a "wake-up call" reaction to Netflix's subscriber revenues (\$1.146 billion) exceeding HBO's (\$1.141 billion) at the time of this article's writing. That's a good thing; more content will attract more consumers, and we'll see the shift really heat up over the next 5–10 years.

Think back for a minute to when Google announced it would acquire YouTube in 2006 for \$1.65 billion in stock—the entire industry lit up like a firecracker, and the conventional wisdom at the time said that revenues from video advertising would exceed operational costs. YouTube's ad revenue was reported to be around \$3.7 billion in 2013, though Google won't break out YouTube revenue and costs specifically, so we really don't know if YouTube is a profit center. While we saw, and will continue to see, online video ad revenue increase, we have to think about where YouTube has been most successful: snackable video, not premium long-form content.

These days, we all know that from a Wall Street perspective, companies talking metrics, scale, and reach over revenues and, more importantly, profit, are being kicked to the curb. Wall Street follows the money, and it's in love with Netflix. Subscription works. For me personally, it's easier to let that \$8/month ride on my credit card whether I use Netflix or not; it's become an invisible recurring transaction. Others are bound to follow, but that doesn't mean they will succeed. In 2015, you are going to see a lot of subscription-based OTT plays. You'll also see familiar vendors in our space suddenly offering services to enable subscription monetization. Once again, the appetites have shifted, and another round of shakeout is within our industry is about to happen. So now what? Where can you trust your content to play?

Content owners, publishers, MSOs, and MVPDs need to consider a couple of really important things to be successful: 1) Protect and enable your content with the right DRM system that future-proofs it for coming devices, and 2) Have an efficient billing and management system that doesn't leave any money on the table. Both come together over the consumer experience as a forgettable line item on a credit card or bank statement, one that's easier to dismiss than to cancel.

So, while I have to agree with my colleague that we are seeing a rise in OTT consumption, there aren't enough properly implemented content business models yet to say the age of cord-cutting has arrived. However, for those of you looking for insight from professionals with experience in these matters, the seasoned contributors of this *Superguide* can certainly shed some light on the new path to success.



—Joel Unickow • Publisher



The State of DRM

By Christopher Levy

2014 saw an explosion of DRM-driven business models and success stories in our industry. DRM is now a mandatory component of licensing content from the majors and content owners at large. Let's take a look at how various industry visionaries are using DRM and what their experiences tell us about DRM's place in the digital media ecosystem.

GILLES BOCCON-GIBOD *SVP, Technology & Chief Architect* **INTERTRUST**

Commonly known as the Daddy of DRM, Intertrust owns over 150 patents in the space and operates the well-known Marlin DRM technology through its ExpressPlay platform. Intertrust also licenses its technology to third-party operators. I caught up with Gilles following Intertrust's big splash at the HbbTV Symposium in Paris last week.

1. With the expansion of the OTT, SVOD, and HbbTV marketplaces, where does Marlin fit into the marketplace?

Marlin has, since the beginning, positioned itself as a flexible technology that could be adapted to a wide number of devices and applications, in a variety of contexts. As such, it is very well placed as a perfect solution for OTT, SVOD, and HbbTV marketplaces, amongst others. Case in point: Intertrust has been very

busy deploying its Marlin implementation, called ExpressPlay, in a growing number of OTT, SVOD, and HbbTV services, including traditional VOD stores, in-flight entertainment systems, Hybrid IPTV/OTT services, and more.

2. More and more focus is being brought to bear on HTML5 playback and Encrypted media Extensions (EMEs) and Content Decryption Modules (CDMs). What's Intertrust's take on HTML5—is it viable?

We have been following the development of the HTML5/EME/CDM space since the very start. It is still a changing space, as the specs aren't quite finished yet. While we are generally supportive of the goals of having a unified model for protected content delivery to many screens, we are also cautious that implementations of HTML5/EME in different desktop browsers may have the unintended consequence of increasing fragmentation rather than removing it.

What we mean by that is that with plugins, the downside was the reliance on closed, proprietary systems delivered as "plugins" to browsers, with all the known problems that this can bring; but the advantage was that it provided a homogeneous technology solution across browsers. So a service provider

could pick a single DRM technology and deploy with that on multiple desktop browser platforms.

With HTML5/EME, the application interface is indeed the same across browsers, but each browser comes with its own choice of CDM implementation(s), which means that a service provider now has to implement a larger set of DRMs in order to be compatible with all desktop browsers. If we look at the CDM implementations that currently ship, or will ship, with the most popular HTML5/EME implementations, we have Marlin, PlayReady, Widevine, Adobe, Apple/Fairplay, and maybe more going forward.

Because of this increasingly multi-DRM world, Intertrust has taken the approach to hide that complexity from its customers and offer a multi-DRM cloud service. But there's a limit to how many DRMs can be supported while guaranteeing a uniform level of performance and service stability.

That being said, Intertrust will provide Marlin CDM functionality for embedded systems as well as desktop browsers that support (or will support) pluggable CDMs, like Firefox (as Mozilla has announced recently that Firefox is implementing the EME/CDM model). We will monitor the space closely and help our customers navigate the technology landscape as it evolves.



3. Building on #2 above, utilizing the Common Encryption (CENC) concept, multiple DRMs now seem viable. You just rolled out PlayReady DRM. How do you position Marlin in the multi-DRM marketplace? Is there room for more than 2 or 3 DRMs?

Adding to the previous related comments about HTML/EME, we have taken a very specific position with regards to adding PlayReady support to our cloud service. As we are entering a phase where multi-DRM ecosystems are gaining momentum, like for instance HbbTV markets where a dual-DRM scheme with CENC and Marlin+PlayReady is standardized, it was important for us to offer PlayReady server-side support to our customers, rather than helping them only with the Marlin side of their technology stack and leaving them to fend for themselves for PlayReady.

This does not mean that we should, or would, support an unbounded number of DRMs going forward. We will do what's practical and required from our customers, but we believe that one DRM ought to be enough (Marlin can serve all devices and all use cases), two DRMs is manageable (with Marlin and PlayReady you have enough commonality to still be efficient across the marketplace), three DRMs is already asking for trouble, and more than that is just nonsense.

4. Where do you think the industry at large should be placing their most R&D dollars with regard to DRM development?

We think the DRM industry should always focus on making it as easy and transparent as possible for service providers who need to use DRM. This

means easy access to the technology components (client SDKs, cloud services, and packaging software), and more standardization around media formats, network interfaces, and things like key managers and authentication services. DRM integration should be just a checkbox item for a service provider, not something they stress about, spend a lot of time on, or worry that it will impact their user experience.

5. Will HbbTV be the first big Marlin success story, and what did you learn in Paris last week?

While we're very happy to see HbbTV ecosystems start to blossom, in Europe and Asia (for example, Freeview+ just launched successfully in Australia) and hopefully in other regions as well soon, it is hardly Marlin's first big success story.

It is true that we don't have the marketing budget that Microsoft has, so we have maybe not been as visible as PlayReady has, but Marlin has had a very healthy deployment profile so far. There are over 300M Marlin-enabled devices in the field, and that's growing fast. Also, there are regions, like China, that have basically adopted Marlin as a de facto standard, and given the size of those markets, that's a very strong success story for Marlin. Demand for online video services with premium content in China is accelerating, and we are delivering a complete solution to meet that demand.

MIGUEL VINAGRE ALVAREZ

Video Partnerships and Evolution

MEDIA SERVICES

TELEFONICA

Telefónica, S.A. is a Spanish broadband and telecommunications

provider with operations in Europe, Asia, North America, and South America. Operating globally, it is the sixth-largest mobile network provider in the world. BuyDRM has been working with Telefonica for several years now to enable its mobile device DRM requirements as the company expands its digital media offerings. Miguel Alvarez heads up their partnerships and oversees Telefonica's strategy. Here's what he had to say.

1. What factors did Telefonica take into account before selecting their go to market DRM platform?

Several factors were taken into account, including content producers' acceptance, consumer electronic devices' support, strategic partnerships, total cost of ownership, integration efforts, etc. Telefonica's main objective is to be able to deliver our content to a maximum footprint of devices and users, simplifying as much as possible any integration need for that purpose.

2. As an operator, what barriers or hurdles did Telefonica encounter on the way to deploying your iTunes and Google Play Apps?

From a DRM perspective, the main barrier has been Apple's requirement to use HLS for mobile network playback, which differs from Wi-Fi environments. Apple justifies it by proposing that HLS is an optimized content delivery protocol. Android's approach is more network-independent and coherent with actual mobile networks status and evolutions. Any harmonization towards a common requirement schema like DASH would be positive.



3. How has implementing DRM affected your existing content workflows?

The DRM requirement has been assumed several years ago in our procedures and milestones of content management procedures, and therefore our content workflows include this specific stage. The main barrier appears when you plan to migrate content or you need to work with more than one DRM, which multiplies storage requirements and reduce delivery efficiencies.

4. Do you feel that DRM has become nearly transparent to end-users and if not, why not? If so, what are the benefits?

Most of CE devices encrypted content delivery is transparent to customers, unless you haven't solved iTunes mobile delivery, which implies a limitation in service delivery to customers, while the browser-based approach implies up-to-date browser versions and plugins to guarantee a successful experience. It also implies some degree of interaction and approval by customers.

5. Where do you see today's modern DRMs needing improvement?

For an operator like Telefonica, which is also operating pay TV solutions based in classical conditional access technologies, a convergent approach would be beneficial in order to simplify the partners and technologies ecosystem, reducing devices requirements when you plan hybrid solutions. Another classical requirement for DRM technologies evolution is a standardized and well-defined interoperable scenario when multiple DRM technologies are being used in order to optimize workflows, storage, and delivery.

6. Are you considering other DRM platforms for your product platform, and if so why?

Actually we're only evolving to replace Netscape Plugin Application Programming Interface (NPAPI) deprecation, changing DRM technology supported, but we aren't looking for an organic evolution as our selected technology allows us to access most of CE devices and is flexible enough to be used complementary in our Pay TV solutions.

ANDREW POPOV Chief Technology Officer BUYDRM

I have been working side-by-side with Andrew at BuyDRM for more than ten years now. He's a brilliant visionary who has become a widely known expert in the development and deployment of commercial DRM technologies. Andrew represents BuyDRM in the DASH Industry Forum (DASH IF), where he has worked with a group of DRM experts to define a backend interface for integrating DRM platforms with encoding and serving platforms. Here's Andrew's take on those efforts.

1. What is the concept behind the Universal Key Management API from DASH IF?

The idea was to develop a common backend interface between DRM platforms and encoding or serving platforms. This concept allows for a standardized mechanism for content key exchange between different parties and platforms. This common way of doing things will simplify content workflows and reduce the effort needed for

integrations between different systems by reducing time and complexity.

2. How did your previous efforts with BuyDRM's Key Management API help in this effort?

As a contributor to the specification, BuyDRM learned these lessons over the past six years with the most widely supported DRM platform in existence—more than 40 partners support our KeyOS Key Management API. We drew upon these lessons learned in our contributions to the DASH IF's efforts. This experience helped us to realize the bigger picture and some of the larger constraints.

3. Explain the Content Protection Information Exchange Format (CPIXF) and how it enables DASH Encoding and Encryption?

The CPIXF defines a container allowing the secure and robust exchange of content protection information between two parties or more. Typically, content protection information is made of keys used for encrypting content and any associated DRM-specific information. There may be one or several keys and one or several DRMs. The goal is to allow entities involved in the content preparation workflow to get the content protection information securely so that the MPD can be generated with all content protection information. In addition to that, one container might contain different encrypted information which can be shared between different entities. Only a valid and legitimate recipient would be able to access this information via the CPIXF.



4. How do you envision operators adopting this API, and are there any barriers to adoption?

A document describing the CPIFX is available for community review until November 20, 2014. We hope that the community at large will provide more feedback so that we can address it and adapt it, where applicable, to the final version. After that it will be ready for adoption. By that time, BuyDRM will also provide access to its partner network and will work with them to help adopt the API. More info is available at <http://dashif.org/white-papers/>.

5. How does the DASH Key Management API support CENC and multiple DRMs?

Since the Content Protection Information container is DRM-agnostic it can contain signaling for multiple content protection systems. Inside the CPIFX container there can be content protection information linked with various DRM System IDs. It might contain the PlayReady content protection information and the Marlin and Widevine content protection information in one container. The content keys themselves will be encrypted, and then encryptor or a 3rd party can use these keys to encrypt DASH media content and add necessary signaling into the MPD. The specification is quite thorough and addresses the scenarios that we face today in the digital media industry.

RYC BROWNRIGG

Vice President, Digital Technology
LIBERTY GLOBAL

Liberty Global (LG) is the largest international cable company in the

world. BuyDRM worked with LG to address its mobile DRM needs and the rollout of its Horizon GO product this past year. This critically acclaimed service is now available in 10 countries and expanding in 2015 to include numerous different new product features for their rapidly expanding user base. I was able to catch up with Ryc via his mobile for about five minutes before he boarded his 5th flight to Amsterdam this month, and here is what he said.

1. What factors did Horizon GO take into account before selecting their go to market DRM platform?

We looked at a number of conventional selection factors. Liberty Global has an extensive linear TV and VoD library in the Horizon Go service so we looked at the acceptance/use of the technology by rights holders and other content companies, size of client, and breath of devices supported.

2. As an operator, what barriers or hurdles did Horizon GO encounter on the way to deploying your iTunes and Google Play Apps?

Some of the content rights holders have conditions/requirements on applications that are released in the application store,s such as not playing content on jailbroken or rooted devices. So we took this into account when selecting a mobile DRM vendor.

3. How has implementing DRM affected your existing content workflows?

Our workflows have been designed from the beginning to allow for relatively simple DRM integration exercise. We did this so that if we needed to change from

one DRM to another or if we needed to add a DRM, we could.

4. Do you feel that DRM has become nearly transparent to end-users and if not, why not? If so, what are the benefits?

Yes. We have made it as transparent as we possibly can. The user still needs to go through an authentication process one time to establish a session and obtain their entitlements but once they have completed it, they are able to discover and play the content they are entitled to without any additional degradation in the customer experience. Users don't "see" DRM during their playback experience, which is good.

5. Are you considering other DRM platforms for your product platform, and if so why?

Not at the current time. That may change but no, today we are not looking for additional DRM technologies.

ABOUT BUYDRM™

BuyDRM™ is a leading provider of Digital Rights Management and Content Security Services for the entertainment, enterprise and education industries with customers spanning the globe. With 13 years of market-leading experience in implementing commercial DRM solutions and media technologies, BuyDRM™ has amassed substantial success stories for many of today's largest brands. Television networks, movie studios, cable MSO's, Telcos, and premium content distributors use BuyDRM's™ award-winning KeyOS™ DRM Platform to provide robust content security for their IP video offerings to a variety of connected devices. BuyDRM's™ customers include NBC Universal, Showtime, Sony Pictures Entertainment, Warner Brothers, HBO GO Europe, HBO GO Asia and HBO GO Latin America, the BBC, RTL Klub, FotoKem, By Deluxe, SingTel, SC Johnson, Philo.com and Lufthansa Hospitality Systems.

PLATINUM SPONSOR



BUYDRM
900 RR 620 S.
Suite C101-155
Austin, Texas 78734
United States
(512) 377-1340
www.buydrm.com
sales@buydrm.com