



A Subscriber's Wish List

After sixty-plus years of steady growth in the entertainment industry the internet has significantly disrupted this ecosystem. Even with the proliferation of multiscreen entertainment and video streaming over the past decade, digital video is still in relative infancy. After all, 2011 was the year when the film industry finally stopped manufacturing film cameras. Television is still trying to find their role in the digital generation. Broadcasters have struggled to adopt new digital technologies and Internet Protocol (IP) workflows. They continue to play catch up to rapid changes in user behavior.

Modernizing the distribution of entertainment will inherently reduce internet piracy. This was discussed extensively in the first parts of this "Turning Pirates into Consumers" series: *Part 1*, *Part 2*, *Part 3*, and *Part 4*. This final paper in the five part series is an open letter to the industry on how to improve digital entertainment's playground. It's a subscriber wish-list outlining some high level features and functionality that address the evolving needs of today's consumer. Here we go:



Figure i – A Subscriber's Wish List for Digital Entertainment

Portability (Anytime, Anywhere, on Any Device)

Multiscreen accessibility is an industry goal, but it's far from ubiquitous. This ability to access content is often discussed in the context of *anytime*, *anywhere* and on *any device*. The industry continues to move in this direction, but there are glaring disconnects.

Consumers today are severely restricted in their ability to watch content on all of their devices. Apple users have their own walled garden, while Google tries to promote a

more open approach. But there are several competing gardens in the broadcast space – and none of them are connected. Content portability should be about shifting from a *content-centric* entertainment culture to a *consumer-centric* one.

UltraViolet's Digital locker⁶ is a move in the right direction with support for multiple devices, operating systems, and allowing family members to share in the rights to purchased movies. The ability to purchase a title once and then play it on any device is still hindered by content owners that are protecting their assets. The digital world continues to be a new frontier where Hollywood is not completely comfortable.



Figure ii - Multiscreen Portability, Cinema to Multiscreen & Operating System transparency

(Platinum) Accessibility

There is little consistency in the release windows for movies once they've appeared in the theater. Delays are typically long for Blu-Ray sales and longer for Internet streaming services. And that's just for domestic markets where the content originates. For some international markets the delay is much longer, and in some cases non-existent. This delay fuels an internet piracy market that has an insatiable appetite for entertainment, and has little patience for scheduled releases in their market.

An actively debated approach is to significantly shorten the various release windows of movies. Movie libraries are often segmented by premium content and long-tail. Retailers and Internet streaming providers could modify their business models to offer a third category of "platinum content". In a *consumer-centric* marketing strategy, the value proposition is segmented by the target audience:

- **Theatres** target movie goers that continue to want a night out of the house, an immersive experience on a large thirty foot silver screen, with 22.2 THX sound (reference), and a bucket of popcorn.
- **Retailers** would release a "platinum Blu-Ray" to be sold at the same time as the theatrical movie. This

would be a special 4K version with the necessary digital rights protection developed specifically for 4K Blu-Rays. One month after the theatrical release the standard Blu-Ray disc would be available with the included bonus footage like featurettes, behind the scenes, and deleted scenes. Home theatre enthusiasts want the satisfaction of ownership and the excitement of unwrapping their newly purchased Blu-Ray.

- **OTT providers** would offer Video on Demand (VoD) users the option to access the movie one month after the standard Blu-Ray release. OTT subscribers are motivated by the flexibility of instant access from the comfort of their living room, computer screen, mobile or tablet.

Each target audience has unique wants and needs, and would not dramatically cannibalize the other two viewing choices.

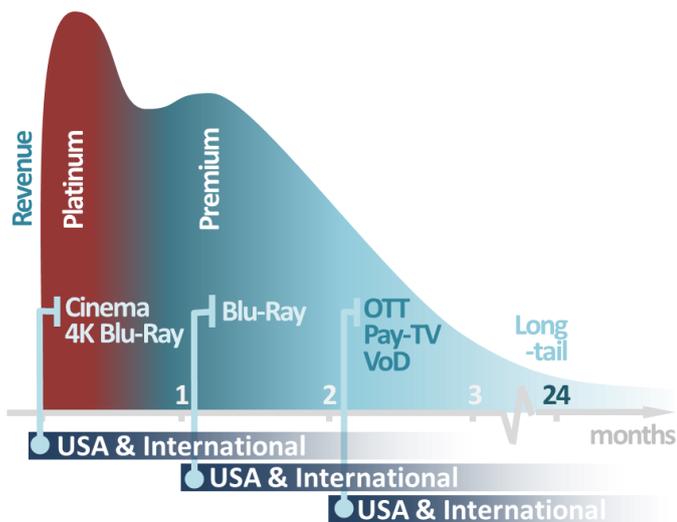


Figure iii – Collapsing Movie Release Windows to reduce Internet Piracy

(International) Availability

The release window for international distribution also needs to be better synchronized. Hollywood often use a trickle-method approach to exposing international audiences is their movies. But movies take too long to reach international audiences. The mantra "Think global, act local"⁸ is poorly adopted by the entertainment industry, and applies to only a few blockbuster releases. Lack of content availability internationally has been identified as a key contributor to piracy⁹. Consumers should decide how they wish to enjoy their entertainment, not content owners. Current rights restrictions are far from the borderless spirit of the internet.

A programmatic¹⁰ and synchronized global launch means that subtitles, dubbing services, and marketing can't be an afterthought. In-scene advertising or product placements that accommodate international brands require planning at the pre-production stage.

There are early signs that OTT services - domestically and internationally - give consumers what they want, at a price point that is acceptable. A study by Ericsson (Figure iv) shows that services such as Netflix have resulted in a persistent reduction in P2P downloads in America. When comparing these figures to an earlier study in Spain, it's

clear that P2P downloading dominates in markets where an OTT service is absent. According to Ericsson, "those who turn to digital piracy do so because on-demand content is simply not available through legal sources"¹¹. A similar survey by Ericsson in the Nordics reported that, "over half the people who previously downloaded music illegally no longer do so after they [were] given access to a streaming service".

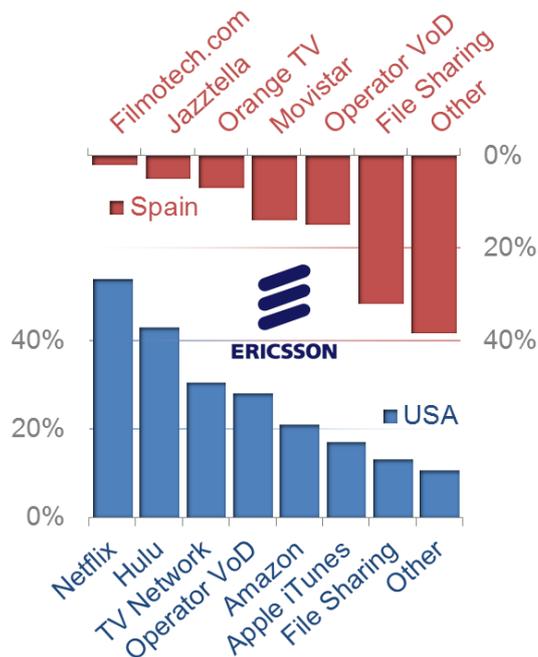


Figure iv - Real Time Entertainment Usage, USA vs. Spain (Use of Online Video Services several times per month)

Longevity (As Technology Improves)

There are three types of consumers today: those that want to own their content, those that want to rent it, and those that are fine with licensing it. In the ownership camp users should have the ability to pay for entertainment in the same way as software. Regardless of which version is purchased – DVD, Blu-Ray, or online - when a better version becomes available (4K, or even 8K in the future) then just an "upgrade" cost to the service or product should apply. In addition, ownership should be active through the title's useful life. The frustration of buying the same movie over and over again should be relegated to the history books.

The future is about cloud storage and should be an integral part of the package. We live in an age where millions of copies of movies and songs exist on individual hard drives, discs, or servers. It's a waste of space. Today's digital society has evolved to where cloud storage only needs a single instance of a movie to be accessible by millions of subscribers. A 'title master' paradigm is the next step for entertainment, where one 'file' containing all versions of a movie (eg. theatrical release, director's cut, extended versions, and other cuts needed to meet various censorship requirements). This title master would accommodate all language tracks, subtitles, or additional commentary tracks (Figure v). Alternate cuts could be interleaved to accommodate geographically specific in-scene advertising.



When a user requests the movie, then the streaming platform would identify the type of device the subscriber has, and the version of the movie they want to watch. Then the service would transcode the movie on-the-fly as it's served to them. With an anticipated explosion of video content over the next decade, this *title master* would significantly help with the efficiency of content management. All titles would also be preserved in the cloud with enterprise level high availability and redundancy.



Figure v – Title Master, the Future of Cloud Delivery

When content becomes "virtual", then the line between ownership and licensing is blurred. The owning community just wants the flexibility to access their content anytime or anywhere and on any device. Licensing users want the same thing, "sans" the disc. If a new mobile, tablet, or multiscreen device is purchased, then content rights can easily be extended. When a new family member is born, then they also get access to the family entertainment library.

(Library) Breadth

Offering a deep library of titles continues to be a challenge. Breadth of content is not only about having a sizable library; it's in the ability to offer that library to a global audience. Geo-location restrictions limit the ability for subscribers to view content in remote markets. These restrictions may also apply to the type of device they are using. In broadcast speak a 'blackout' screen is displayed when a user is out of the designated geographic region - or they may be served alternate content. In some cases these restrictions make little sense. For example, broadcaster's will blackout their live news to international users. News significantly loses its value after the broadcast. International users could be easily served with then same live news and have substituted international advertising – thus extending the broadcaster's advertising reach. Because of regional restrictions dictated by content owners, international audiences only sees a fraction of their programming. It's a lingering reminder of the highly localized and segmented television from the past.

On a related note, video streaming services are differentiating their offering through exclusive content. For example Netflix led the industry with their decision to become a content creator in 2011¹². They began with the Emmy award winning series *House of Cards*, recently renewed for a fourth season¹³. Now tech giants AOL, Microsoft, and Yahoo are hedging their bets as content creators, hoping that subscribers will be swayed towards their service¹⁴. But exclusive content further limits the internet consumer's ability to access a single source in a way that resembles linear television. Distribution of

Internet content in the broadcast sense has yet to sort itself out. That said, the entertainment industry has a long journey ahead to mimic the borderless and global nature of the internet.

(Immersive) Quality

As internet speeds increase, users around the globe are watching higher quality video. YouTube began supporting 720p in November 2008. One year later 1080p was announced¹⁵ while also switching their content to the more efficient *H.264*¹⁶ codec. Ericsson reports that consumers are willing to pay for extreme quality 4K UHD video. These are early signs that consumers are willing to open their wallets for a more immersive experience beyond high definition.

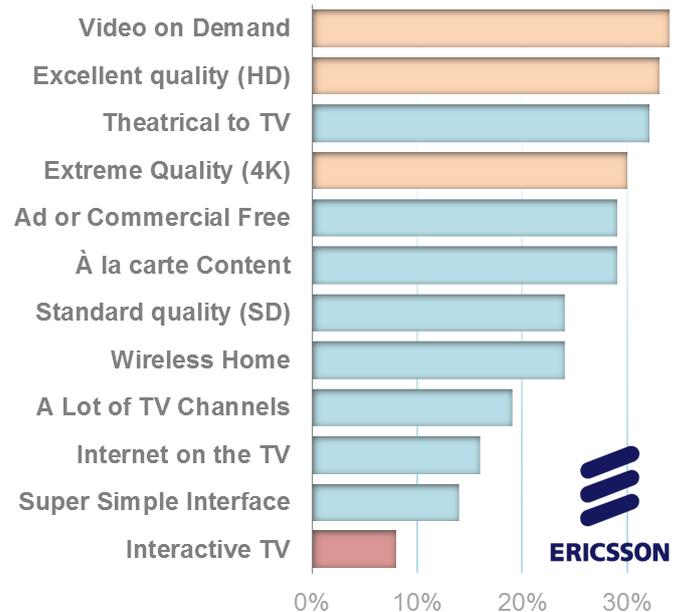


Figure vi - Services Most Worthwhile Purchasing ('12). Seven Markets: China, Germany, Spain, Sweden, Taiwan, UK & USA.

Demand for higher quality continues with 4K UHD (3840 x 2160 pixels) which will use the *HEVC H.265*¹⁷ codec. Ubiquitous 4K won't happen until H.265 is implemented in consumer electronics hardware. By the end of the decade subscribers should have the ability stream 4K video at speeds ranging from 12 Mbps to 20 Mbps.

Price (Sensitivity)

Pricing debates are connected to ownership, renting, and licensing (subscriptions). Disc purchases typically cost significantly more than rentals - rental services cost more than subscriptions. Digital consumers have come to realize that ownership of premium content is no longer rational: What is the practical value of a movie when it is only watched once or twice in a lifetime? What is the practical value of a song if it's listened to no more than 50 times? Subscription services are ideal for users that are aware of their entertainment's useful life.

In a subscription environment such as OTT, content is monetized through subscriptions fees (SVoD),



transaction fees (TVoD, i.e. video rental), or Advertising (AVoD, i.e. free content subsidized by brand marketing). A future scenario could be where an OTT service offers all three capabilities in a single package: Content segmented by:

- "Premium content" that are one to six months old using TVoD
- "Featured content" consisting of titles based on their time-sensitive popularity, via SVoD
- "Long tail content" representing the rest of the library using AVoD.

(Fun & Engaging) Experience

As content becomes more competitive on a global scale, entertainment providers need to attract subscribers through an exciting and fun user experience. Content is still king, but the interface where the user interacts is the kingdom. This is the playground where subscribers will stay and play. If the user is having fun, they will stay longer. If they stay longer there is a higher propensity for them to spend more money.

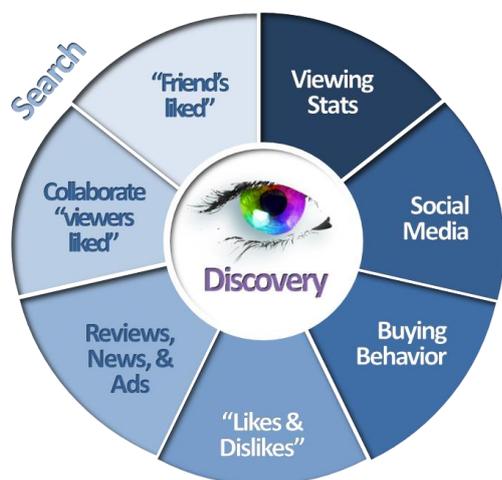


Figure vii – Search & Discovery, A User centric model for recommendation engines

 Social engagement is at the center of this playground. It's where friends post suggestions, rate content, and offer viewing statistics. The subscribers buying behavior as well as their peers are monitored and correlated so that different content could be suggested. These are titles that are otherwise undiscoverable through traditional means (Figure vii). This is the virtual playground surrounding the world of entertainment. The playground is an environment where consumers enjoy themselves - before, during, and after content is consumed.

The value of social media in entertainment should not be underestimated. According to Ooyala, "Personal testimonials are one of the most powerful influences on all types of consumer action... By learning what their trusted friends have enjoyed, and by comparing that to their perception of how much they have in common with the recommender, viewers get a very personalized and motivating impression of what to check out."¹⁸

It's not just content that's important. It's about a bi-directional dialog and relationship with subscribers. The

consumer is no longer an anonymous viewer to entertainment. Instead, the entertainment provider needs to facilitate a personal and engaging dialogue with each and every subscriber. A better understanding of the subscriber's behavior needs, and buying habits results in better engagement. It's always more fun going to a playground where people know who you are.

Read Additional Articles in this Series

I. Consumption is Personal

- <http://dusil.com/2013/02/28/consumption-is-personal/>

In the days of linear television, broadcasters had a difficult task in understanding their audience. Without a direct broadcasting and feedback mechanism like the Internet, gauging subscriber behavior was slow. Today, online video providers have the ability to conduct a one-to-one conversation with their audience. Viewing habits of consumers will continue to rapidly change in the next ten years. This will require changes in advertising expenditure and tactics.

II. Granularity of Choice

- <http://dusil.com/2013/04/01/granularity-of-choice/>

The evolution from traditional TV viewing to online video has been swift. This has significantly disrupted disc sales such as DVD and Blu-Ray, as well as cable and satellite TV subscriptions. With the newfound ability to consume content anytime, anywhere, and on any device, consumers are re-evaluating their spending habits. In this paper we will discuss these changes in buying behavior, and identify the turning point of these changes.

III. Benchmarking the H.265 Video Experience

- <http://dusil.com/2013/04/22/benchmarking-the-video-experience/>

Transcoding large video libraries is a time consuming and expensive process. Maintaining consistency in video quality helps to ensure that storage costs and bandwidth are used efficiently. It is also important for video administrators to understand the types of devices receiving the video so that subscribers can enjoy an optimal viewing experience. This paper discusses the differences in quality in popular video codecs, including the recently ratified H.265 specification.

IV. Search & Discovery Is a Journey, not a Destination

- <http://dusil.com/2013/05/13/Search-and-Discovery-Is-a-Journey-not-a-Destination/>

Television subscribers have come a long way from the days of channel hopping. The arduous days of struggling to find something entertaining to watch are now behind us. As consumers look to the future, the ability to search for related interests and discover new interests is now established as common practice. This paper discusses the challenges that search and discovery engines face in refining their services in order to serve a truly global audience.



V. Multiscreen Solutions for the Digital Generation

- <http://dusil.com/2013/06/24/multiscreen-solutions-for-the-digital-generation/>

Broadcasting, as a whole, is becoming less about big powerful hardware and more about software and services. As these players move to online video services, subscribers will benefit from the breadth of content they will provide to subscribers. As the world's video content moves online, solution providers will contribute to the success of Internet video deployments. Support for future technologies such as 4K video, advancements in behavioral analytics, and accompanying processing and networking demands will follow. Migration to a multiscreen world requires thought leadership and forward-thinking partnerships to help clients keep pace with the rapid march of technology. This paper explores the challenges that solution providers will face in assisting curators of content to address their subscriber's needs and changing market demands.

VI. Building a Case for 4K, Ultra High Definition Video

- <http://dusil.com/2013/07/15/building-a-case-for-4K-ultra-high-definition-video/>

Ultra-High Definition technology (UHD), or 4K, is the latest focus in the ecosystem of video consumption. For most consumers this advanced technology is considered out of their reach, if at all necessary. In actual fact, 4K is right around the corner and will be on consumer wish lists by the end of this decade. From movies filmed in 4K, to archive titles scanned in UHD, there is a tremendous library of content waiting to be released. Furthermore, today's infrastructure is evolving and converging to meet the demands of 4K, including Internet bandwidth speeds, processing power, connectivity standards, and screen resolutions. This paper explores the next generation in video consumption and how 4K will stimulate the entertainment industry.

VII. Are You Ready For Social TV?

- <http://dusil.com/2013/08/12/are-you-ready-for-social-tv/>

Social TV brings viewers to content via effective brand management and social networking. Users recommend content as they consume it, consumers actively follow what others are watching, and trends drive viewers to subject matters of related interests. The integration of Facebook, Twitter, Tumblr and other social networks has become a natural part of program creation and the engagement of the viewing community. Social networks create an environment where broadcasters have unlimited power to work with niche groups without geographic limits. The only limitations are those dictated by content owners and their associated content rights, as well as those entrenched in corporate culture who are preventing broadcasters from evolving into a New Media world.

IX. Turning Piratez into Consumers, I

- <http://dusil.com/2013/10/25/turning-piratez-into-consumers-i/>

IX. Turning Piratez into Consumers, II

- <http://dusil.com/2014/07/15/turning-piratez-into-consumers-ii/>

X. Turning Piratez into Consumers, III

- <http://dusil.com/2015/05/12/ott-multiscreen-digital-video-series-10-turning-piratez-into-consumers-iii/>

XI. Turning Piratez into Consumers, IV

- <http://dusil.com/2015/05/26/ott-multiscreen-digital-video-series-11-turning-piratez-into-consumers-iv/>

XII. Turning Piratez into Consumers, V

- <http://dusil.com/2015/09/22/ott-multiscreen-digital-video-series-12-turning-piratez-into-consumers-v/>

Content Protection is a risk-to-cost balance. At the moment, the cost of piracy is low and the risk is low. There are no silver bullets to solving piracy, but steps can be taken to reduce levels to something more acceptable. It is untrue that everyone who pirates would be unwilling to buy the product legally. It is equally evident that every pirated copy does not represent a lost sale. If the risk is too high and the cost is set correctly, then fewer people will steal content. This paper explores how piracy has evolved over the past decades, and investigates issues surrounding copyright infringement in the entertainment industry.

About the Author



Gabriel Dusil was recently the Chief Marketing & Corporate Strategy Officer at Visual Unity, with a mandate to advance the company's portfolio into next generation solutions and expand the company's global presence. Before joining Visual Unity, Gabriel was the VP of Sales & Marketing at Cognitive Security, and Director of Alliances at SecureWorks, responsible for partners in Europe, Middle East, and Africa (EMEA). Previously, Gabriel worked at VeriSign & Motorola in a combination of senior marketing & sales roles. Gabriel obtained a degree in Engineering Physics from McMaster University, in Canada and has advanced knowledge in Online Video Solutions, Cloud Computing, Security as a Service (SaaS), Identity & Access Management (IAM), and Managed Security Services (MSS).

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Tags

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