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VoD pricing in Latam: a business perspective

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0 - Summary

Context: Video on Demand (VoD) projects in Latin America are beginning to improve after five years of sluggish progress. iPTV projects are leaving room for OTT developments, more flexible and supporting more devices. This trend seems to be promising, for current services only reach subscribers through the Operator's network. The last frontier to mass access in Latin America is retail pricing. What seems to be only a cost battle between Content owners and Operators actually involves other remarkable elements in VOD service design.

Much like broadband or mobile value-added services (VAS) a decade ago, upcoming VoD launches in the region are surrounded by much expectation. Recovering declining ARPUs in a

stagnant industry is the general expectation.

In just five years, experience has been gained, technological barriers have been overcome, and better services are being provided. However, there is still debate over pricing and critical mass of customers. Some key issues remain: What does real growth look like in a VoD project? Is there a "magic number" for VoD pricing in Latam? Are there other factors in the long-term strategy more important than price are being overlooked?

Purpose: The purpose of this paper is to answer the questions above, examine VoD prices in Latam (both TVoD and SVoD), explain a few drivers of price creation, and explore a possible correlation between price and purchasing power (PPP) per country.

Results: There is no evidence of correlation between VoD prices and PPP for each country in the region. The analysis shows that in addition to price there are some 20 other variables that must be taken into account in order to fine-tune a project in the exploration phase.

Scope of analysis: About 25 examples of VoD in the region were observed, including 5 international services. Examples included Cable, Telecom and Satellite VoD services focused on the mainstream segment. In the cases that prices were not clearly identified or communicated¹, projects were not considered for the sample.

1 - Introduction

VoD services give the Operator's end customer full freedom to choose both timing and reproduction options for a given content (movie, series or documentary), as opposed to linear TV and Pay-Per-View (PPV). In the press and even among business actors there is a debate between acronyms, focused on the technological medium to reach the customer, leaving service features aside. Figure 1 presents a comparison aiming at settle the discussion on the two best-known VoD technologies, iPTV and OTT. For the purpose of this paper, iPTV involves either broadcast or on-demand service, and OTT refers to a player lacking of network¹. The IP network is used to get the video signal to a set-top box that may be connected to a PC or a TV set. In this context, the Operator has not only a Network, but also infrastructure and transmission technology. Satellite or cable operators have different technologies. They have in common with Telcos a dominant market position, but they are more used to content management. There is an historical reason for this difference, for they have been associated to linear TV and PPV for decades. Telcos, on the other hand, are the new kids on the block, with the highest expectations regarding iPTV, since they hope to compensate for losses in the traditional business. Cables and Telcos have something in common though: their network management capacity enables them to ensure reasonable quality of service (QoS) even for high-definition (HD) content.

	Fig 1 – iPTV v	s OTT
Issue	iPTV	ОТТ
Rationale	"My network, my customers"	Total freedom.
Linear TV	Yes	No
Devices	STB is the main idea.	All possible screens.
Service	Defined with precision	Best effort
HD	Yes	No
Billing	Several payment methods	Credit card
BW	> 2M	Adaptive bitrate.
		Convicint Spark Consulting

What Figure 1 leaves out is the philosophical difference between iPTV and OTT. In iPTV services, the Operator fully defines what the Network does and who are the natural VoD customers. In OTT context there is no "Operator's Network"; it is not possible to ensure a minimum QoS, but only a "best effort". This opens up a greater market potential for two

reasons: the potential customer base is expanded beyond network limitations, and multiple devices (game consoles, Smart TVs, iPhone, Android, etc.) allow for more and better content consumption.

There is a subtle concept involved. Ten years ago, iPTV projects were distinctly defined: closed networks, project customers, and fully defined services. This reality is now entering a more grayish area, where competition is not with neighboring Operators, but with new competitors from a different region. Thus the mindset of VOD is changing.

Beyond these project "flavors", growth in the Region is certainly taking place, even though technology and economy indicators place Latam well below Europe and North America results.² VoD is therefore at an initial stage, counting only 4 million SVoD customers, but with a 50% annual growth rate projection. Brazil, Mexico and Argentina lead all statistics, with 85% of business in the region.³

With regards to structure, this paper begins with a discussion of the Latam market; it goes on to examine the VoD business types (Section 2); it later provides a conceptual framework to explain the importance of content cost (Section 3); then two typical modelizations are presented which compare VoD business drivers (Section 4); finally, it analyzes Latam pricing (Section 5) and presents conclusions (Section 6).

2 - VoD "flavors"

The first step in designing a VoD business is a tough negotiation of Operators with Studios, both Major (Hollywood's seven big studios) and Premium (about one hundred content providers). The selection results in a heavy tail of genres suitable for a specific market.

Negotiation also defines the type of business, which in turn determines VOD "flavor" and the way end customers can access content.

- Transactional VoD refers to short-term (24-hour) rental, during which the end customer can watch a certain title. It is an isolated event generating a transaction. A good example of this is Vudu, Walmart's OTT. Titles available in this modality are typically new releases and adult content.
 - Electronic sell-through (EST) is a lifelong purchase. It may take place physically, if the STB has a hard-drive connection, or providing lifetime access to the content, stored in the Cloud.

 Apple's iTunes store is a great example. The content offered here is exactly the same as in TVoD: new releases and very little else.
 - AVoD (Ad-supported VoD) is a simple concept but is outside the scope of this paper. As the subscriber doesn't pay, a sponsor covers content and other costs for advertising purposes, or aiming to build a critical mass of users for other businesses. The best examples are Hulu and YouTube.

- Finally, the subscription-based model (SVoD) involves monthly payments and most resembles the financial model of Cable Operators and Telcos. The subscriber is activated, pays a recurring monthly charge, and has access to thousands of titles of various genres, not necessarily recent. This is the case of Netflix, Amazon Prime and Hulu Plus.

This paper focuses on the most common models, TVoD y SvoD, which are present —although not always at the same time— in most current VoD projects in Latam. Not all content is available at any time for all VoD models, due to the life cycle of movies and series, which tries to maximize revenues in all possible formats. Content is released in theaters, then in DVD and Blue Ray, and finally in TvoD. The title is withdrawn for some months, and comes back in SvoD. While TVoD brings new releases revenues, media attention and branding, SVoD usually grows more easily as a result of content variety and the habit of returning, without the need for constant advertising support to promote use.

VoD service design involves solving dozens of details in different areas. This is evident in the planning, where it is mandatory to define variables that later on impact on business plans (BP) such as countries to reach, Studios contracts terms, number of titles per year, the possibility of offering HD, and the variety of available devices. Some of these elements impacts on processing costs, which in some cases are higher than expected for a simple reason: lack of technical standards.⁴

3 – Domains in VoD development

Generally speaking, full understanding of any Telco or Operator business requires a conceptual framework to simplify analysis. One of these is the STOF model⁵ –popular in MSO literature–, which consists of four essential areas affecting project growth. These four domains interact in the initial phase (design or exploration) and from the moment of the launch (exploitation).⁶ In the case of VoD, business exploration involves selecting adequate content, devising marketing actions, understanding how to set the project apart from the competition, and anticipate all possible technological innovations in the near future (new devices, apps, interface improvements, etc).

It is likely that the most critical aspect of this initial phase is the financial domain. Even if the design has been successful, the Operator must be able to sustain the business for 2 or 3 years before break-even. During exploitation, constant interface improvements and a good integration with product analytics –in order to understand how it is exactly that customers interact with the content– are key to maximizing revenues and increasing market share.

STOF model makes reference to four dimensions: service, technology, organization and finance. Figure 2 shows essential aspects as applied to VoD.

		Fig 2 –	STOF dimensions	and VOD		
ſ		Dimension	Definition	Examples		
S		Service	Content definition Market differentiation. Type of VOD. Any VAS included?	Major Studios selection. Premium content ? Devices. Is it SVOD, TVOD or both? Promotions? Bundles?		
Т		Technology	Bandwidth QoS Integration with CRM or Analytics	High BW enables better penetration and assures QoS. Profiles and processing costs.		
0)	Organization	Content, legal and Mkt skills in the organization. Possible fixed-mobile convergence reg Content.	Seek help from aggregator Share same Studios with partners.		
F		Finance	Revenue share negotiation MGs negotiation	Need of CPS model		
		diameter and the second		Copyright Snark Consulting		

The Service dimension is tied to basic project definition. What is the content and device roadmap to maximize investment? Which Studios are better? How do they match with Telco branding? The Technical dimension sets a limit by narrowing down the potential customers and the maximum possible speed to reach them. The Organization dimension deals with a possible lack of know-how for solving essential issues; some tasks may need to be outsourced. As for the Finance dimension, annual content payments demand superior skills of negotiation with the Studios. Will the Studios accept a CPS (cost per subscriber) model in order to reduce Minimum Guarantees⁷ (MGs), making the business viable?

Beyond these examples, it is remarkable that, in Figure 2, all dimensions depend in a way or another on the content, which has shown an increasing cost in recent years. While there is still some heated debate about what the cost of entertainment means, it is undeniable that the general public finds in cinema one of the last sanctuaries for art, especially in Blockbusters and recently in TV Series. Let's examine some of the reasons for the increase of content cost:

- Growing content demand by new players such as Netflix, Walmart or Amazon. They act aggressively and are willing to pay more than traditional players. For them it is the cost of getting into business.
- Other new players (Hulu) are the Studios themselves, exploring how to challenge the business or to possibly compete from the opposite trench.
- Studios realize that the advent of new formats –DVD and Blue Ray years ago, VoD shortly–does not cannibalize traditional revenues, but bring opportunities of higher total revenues instead.⁸
- Brand new premium windows explored by some Studios, with only two months between the theatrical release and the VoD release.⁹

- General consensus about the fact that SVoD subscription models are profitable in the long run, with churn rates lower than those set in business design five years ago.

All the above reasons stress the importance of careful business modeling. The next section presents more detailed examples illustrating Latam specific situation.

4 – Modelization of a VoD business plan (BP)

The four forces acting on the VoD project can be deconstructed and represented as variables into a financial model. It is possible to design a BP reflecting each effect as well as the planning for future revenues, costs, cash flow and other items. The following are the most important parameters for the modelization.

	lain parameters in VOD design			
Parameter	Source	Constraint	Uncertainty	
Initial critical mass	Mkt Operator	Size of operator	Low	
SVOD subs	Mkt Operator	Budget	High	
TVOD subs	Mkt Operator	Budget, virality estimation	Medium	
# Titles	Studios	Content roadmap	Low	
# Devices	NW Operator	Decision	Low	
Product mix	Mkt Operator	Decision	Low	
Content cost	Studios	Budget	High	
QoS, HD avail	Tech Operator	Budget	Low	

This is not a comprehensive list, since there are about 20 more parameters (TvoD virality, SVOD churn, number of Studios, MGs CAGR, etc) that contribute to defining the curves. VoD revenues grow over time as an S-curve¹⁰. In the first few months, subscriber acquisition usually takes place at the expense of a certain amount of traditional advertising and considerable activity in social networks. Growth is subject to a slightly greater churn than in mobile telephone services. In most cases, it is only in year 3 that competition rises, thus flattening the curve.

TVoD key metric is the number of transactions, which takes a fraction of the established SVoD customer base. This rate depends on initial advertising expenditure and on users' interface experiences during the vital first months.

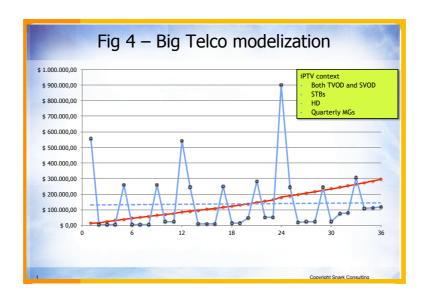
In summary, it is possible to estimate this initial set of parameters for each region, although with some uncertainty, depending on the piracy effect, VOD awareness, and the purchasing

power of a given market. The combination of SVOD monthly payments and TVOD rental events determine the revenues S-curve.

As for costs, the estimation may not be easy: several variables are involved (absolute figures, payment schedule, discounts, compensation models). Content cost variability and long negotiations require an extremely skilled legal team or the support of an Aggregator¹¹ acting as intermediary. The financial risk is increased by the minimum guarantees (MGs) demanded by the Studios. It should be noted that revenues from a transaction (TVoD) or a monthly subscription package (SVoD) are usually divided in roughly equal parts between the Operator and the Studio, ¹² based on revenue-share model. Other parameters in the table include technical costs, like the number of titles per year or HD availability.

The result of this theoretical exercise can be seen as a family of S-curves. As shown in Figures 4 and 5, there is usually a break-even point between years 2 and 3. An important structural factor is the critical mass of customers required to get revenues from the beginning in order to buffer initial costs. It follows that large Operators face lower financial risks, and should be able —in theory- to reach break-even earlier. In compensation, Studios usually demand best upfronts or economic conditions from "Big Telcos".

Figure 4 shows typical growth for a Telco with half a million ADSL lines. In the modelization the Telco has made a considerable investment in Content. The red curve¹³ represents total VoD revenues. The blue line, showing peaks at the beginning of the year and every quarter, represents total costs. The dotted blue line represents average costs over time. The model includes MG payments to Studios at the beginning of every year, and quarterly payments for processing and file encoding. In comparison, the remaining monthly payments for content and other smaller technical costs look negligible. Under these circumstances, it is understandable that Operators are reluctant to agree MGs for the noticeable "expenditure peaks" affecting the project.



On the opposite bench of Big Telcos are the new players who, without an initial critical mass, rely on better interfaces, lower costs or favorable regulations to beat larger rivals. Figure 6 presents an OTT that begins almost with zero subscribers and grows as a result of "try & buy" promotions. The typical example is one month free of charge. Due to know-how or leveraging on previous business, this OTT is close to Studios, and possibly it is able to spread financial costs through a cost per subscriber (CPS) model. Here, cost peaks are not so sharp, and breakeven takes place slightly later. Churn has been estimated as slightly lower than in the Big Telco case¹⁴ ¹⁵. OTT growth is slower but does not experience as many negative cost peaks. This modelization does not offer HD, and relies on high device versatility Instead.



5 - VoD Pricing in Latin America

By mid 2013, there are about fifty VoD projects in Latin America. In this paper the sample includes the most significant ones, as well as the largest possible number of countries, considering similarities with regards to three main criteria:

- General content for "mainstream" audiences
- Main goal of profitability vs fidelization or advertising goals
- VOD operating as a separate entity, not bundled with other TV services

In summary, the most representative projects in the Latam Region have been selected to display VoD prices in the period Jun 2013-Aug 2013, and have been compared to the evergrowing supply of "outsiders" such as Netflix, Vudu, or iTunes.

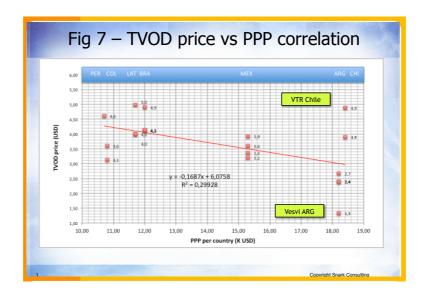
The reason for the first exception is the existence of projects such as Mubi, Philos, or Muu which are devised for segmented customers like cinephiles or offered for paid TV services

fidelization. As regards to the profitability goal, something has to be said about Cuevana, a relatively successful VoD projects in the Latam region from 2010 to 2012. It was totally free – and illegal. Cuevana became highly popular, setting a standard for VOD; it offered the best HD releases and the most attractive TV series, including the latest seasons, free of charge, with subtitles and an excellent interface ¹⁶ ¹⁷, setting a standard of gratuity for VOD difficult to be forgotten. Finally, the third exception is due to the need of a reasonable benchmark.

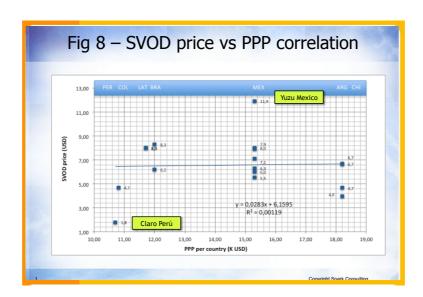
Results are presented in Figure 6, showing projects by country and comparing TVoD and SvoD prices with country's PPP value. In the case of TVoD, prices are those of rentals of HD new releases. The LATAM indicator refers to regional projects included in this paper. PPP values were sourced from World Bank statistics. ¹⁹ In the case of Argentina Peso (ARS), it was chosen an average between official and black market exchange rates (40% gap as of August 2013)²⁰.

						nmar	
Country	Service	Operator (or owner)	TVOD \$ local	TVOD Price USD	SVOD \$ local	SVOD Price USD	PPP USD
ARG	On Video	Telefonica	18	2,40	50 50	6.67	18.20
ARG	Arnet Play	Telecom	18	2,40	50	6.67	18.20
ARG	On Demand	Cablevision	20	2,67	35	4.67	18.20
ARG	Vesvi	Grupo Vi-Da	10	1.33	29.9	3.99	18.20
BRA	GVT	GVT	9,9	4.13	,-	0,00	12
BRA	Now	NET	9,9	4.13	14.9	6.21	12
BRA	On Demand	Sky		4,90			12
BRA	Vivo Play	Telefonica	9.9	4.13	19.9	8.29	12
COL	ClaroTV	Claro	6900	3,60	9000	4,69	10,80
COL	VideoTienda	UNE-EPM	6000	3,13			10,80
	On Demand		2490	4,88			18,40
CHI	Bazuka	VTR	1990	3,90			18,40
PER	Claro VOD	Claro	12,8	4,61	5	1,8	10,7
MEX	Clarovideo	Claro	49	3,92	79	6,32	15,30
MEX	Yuzu	Maxcom			149	11,92	15,30
MEX	Total Movie	Total Play			100	8,00	15,30
MEX	On Demand	Cablevision			99	7,92	15,30
MEX	Klic	Cinépolis	45	3,60	89	7,12	15,30
MEX	On Demand	MegaCable	40	3,20	75	6,00	15,30
MEX	Bajo Demanda	Axtel	42	3,36	69	5,52	15,30
LATAM	Netflix	Netflix				7,99	11,7
LATAM	iTunes	Apple		3,99			11,7
LATAM	Prime	Amazon		3,99			11,7
LATAM	Vudu	Walmart		4,99			11,7
LATAM	Hulu Plus	Providence				7.99	11.7

Figure 7 shows TVoD values from the previous table. A linear regression between these values and PPP per country was performed. The horizontal axis displays the name of countries involved as well as PPP prices (expressed in thousand of USD). The chart highlights two cases (VTR Chile and Vesvi Argentina) that will be analyzed in the Conclusions section.



In a similar way, Figure 8 presents SVoD prices vs PPP values. Highlighted examples are Yuzu in Mexico and Claro in Peru.



6 - Conclusions

VOD players must adjust their business models to changes in external factors like Content industry prices as well as uncertainties in the design and exploitation phases, such as the set of variables described before. By choosing the right BP, VOD players can sustain market competition and provide customer value.

While analyzing the charts it must be noted that big Operators, regional OTTs and local OTTs are playing in different leagues. A big Operator can endure bigger MGs, balance content related loss with SVA additional revenues, wait longer for break-even and move on an iPTV strategy relying heavily on content and HD. Regional OTTs have probably reached CPS-base agreements and obtained market differentiation through better interfaces, simpler "all you can

eat" pricing plans and gadget availability. Local or smaller OTTs are still struggling, looking for shorter-term contracts with Studios or launching white label products.

Some Operators view OTTs as a menace, fearing they could cannibalize their revenues. But the opposite is happening: some delayed projects are boosted by the competition with OTTs, or else are unexpectedly born like OTT. Two good examples of this effect are Yuzu/Maxcom in Mexico, and OnVideo from Telefónica Argentina -which is migrating to OTT after a logical iPTV beginning two years ago.

Figures 7 and 8 show significant price dispersion and no correlation at all with countries PPP. Dispersion can be explained, on one hand, by the fact that the VoD business is recent and there aren't too many competing players. On the other hand, Netflix (for SvoD) and iTunes (for TvoD) have set a reference price in the region. Additionally, the idea that all services can be benchmarked in terms of PPP is related to the type of goods and even to the way PPP is calculated.²¹ It can be expected that with more players competing in the near future, a certain logic regarding price formation will emerge. Meanwhile, current strategies can be described by gathering players into these groups:

- "Copycats": Except in countries with significant competition (Mexico and Brazil), pricing stays in line with regional competitors and follow the rather simple pattern of one price per model: USD 3.50 for TVoD and USD 7 for SVoD.
- "Best Value Proposition": VTR in Chile and Yuzu in Mexico (Fig 8) can afford to be price leaders in SVoD because they offer better service: premium or adult content, live events, better quality or more devices, thus allowing them to move away from the crowd.
- "Cheap VoD": Claro in Peru and Vesvi in Argentina (Fig 7) offer considerably lower prices than competitors. Website inspection determined a rather poor content on these projects. Either they intend to consolidate their offer with more traditional services, or they don't believe VoD will make a great contribution to their business. In any case, both examples are very different in nature: Claro is a part of a large regional Telco undergoing a major content transformation, ²² and Vesvi is a much smaller group focused on teenage content.
- "No VoD": Antel is a big Uruguayan Telco with a dominant market position²³ and focused on FTTH migration. But Antel is not in the chart, for its VOD service has not been launched yet. The delay is a smart move if it reflects long-term and better negotiations with Studios, but in the mean time Netflix has already launched and gained awareness in Uruguay.

Any price discussion takes for granted that VoD projects in Latam are mature, but this is not always the case. Several improvements are expected; they can be described in terms of the STOF model:

- Service: VoD value proposition must be plain and simple to adress a difficult target: customers still mesmerized by Cuevana-likes, piracy, and linear TV. Contrary to this, price and content information is remarkably absent from web or call centers. Klic (Mexico) has learnt the lesson, and offers a very simple FAQ including all quality and price details. Not surprisingly this company is about to release a prepaid VoD product intended to attack the low-income segment.
- Technology: there is no point in offering the best content of Hollywood, unless QoS could be managed according to customers ARPU. Bandwidth is vital to gain more potential customers and to offer higher definition content²⁴ in the future.
- Organization: Big Telcos face the challenge of lacking of know-how related to content in two particular areas: a legal staff ready to negotiate with Studios, and a business intelligence team to perform Analytics on transactions.
- Finance: The struggle around VOD prices is similar to the "Content is King"²⁵ controversy a decade ago. Is the content situation in Latam the same as that of digital music before iTunes set the USD 0,99 magic number? It would be very simple to claim here that a 30% price reduction would solve all business development barriers. Reality is by far more complex: from a pure finance view price is not alone in BP design, and from VoD users' perspective, "binge viewing" is threatening the whole business.

In summary, most of the players have followed iTunes and Netflix "magic numbers" price strategy. Actually Netflix on the SVOD realm has done more than setting a price: it has secured no traffic shaping from third parties, promoted a multiscreen service, and combined BI knowledge with series production²⁶. As for TVOD, Walmart's Vudu service stands out (offering not only HD, but also 3D), but is relatively unknown in the region. In countries where VoD hasn't been launched, the first mover who shows some differentiation in the triad "content, usability and price" will dominate the market and in the long run be able to set the pace.

7 - Acknowledgements

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8 - References

1 In some cases VoD belongs to a "bundle" of services (3play, 4play) or it is offered as a "Customer retention" package. In both situations it is useless to include such cases into this paper.

2 There might some discussion about OTT exact definition (example, WhatsUp is an OTT service because it bypass networks). See "Over-the-top phone services: Joyn them or join them" (The Economist, Aug 2012) at

http://www.economist.com/node/21560298About 15% of households in LatAm can access to VoD projects, far from US and Europe figures (in average 50%). More information in "Europe Key Data" (IHS Screen Digest, 2012) at http://www.ivf-video.org/new/public/media/Europe 2012.pdf

3 Information and figures provided in conferences by DLA, Business Bureau and Dataxis (July 2013).

4 For VoD purposes, Studios would deliver an extremely complex and heavy mezzanine file. After proper codification the file is ready for platform ingestion. Metadata (images, asset information, subtitles, trailers) should be also be ingested at this point to feed the VoD interface. Additional info in "An introduction to video metadata" (Kauser Kanji, Jan 2013) en http://www.VoDprofessional.com/features/introduction-to-video-metadata/#.UQKKrGa4vV4.twitter

5 "Business Model for IPTV Service: a dynamic framework" (Bowman, Zhengjia et al, Info magazine, 2008) available at http://www-users.cselabs.umn.edu/classes/Spring-2010/csci8211/Readings/IPTV-

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6 "Exploration vs exploitation: an empirical test of the ambidexterity hypothesis", (He and Wong, Organization Science, 2004), available at

http://www.academia.edu/168836/Exploration_vs._Exploitation_An_Empirical_Test_of_the_Ambidexterity_Hypothesis 7 MGs o minimum guarantee are the upfronts requested by Studios on the beginning of a given term. See more information in "Perspectives: Revenue recognition matters unique to the motion picture industry" (Entertainment, Media & Communications Industry, PWC, 2009) available at http://www.pwc.com/us/en/industry/entertainment-media/assets/revenue-recognition-movie-industry.pdf

8 Figures about OTT growth in revenues and market share: data form Informa Telecoms and Media and Nagra from NexTV conference, Buenos Aires, June 2013

9 For additional information on new ways of distribution, see "Hollywood's new screen test" (Fritz and Kwaak, The Wall Street Journal, June 2013) available at

http://online.wsj.com/article/SB10001424127887323836504578552521772173386.html

10 Modeling with S-curves is extremely useful in technology substitution environments. A good reference is "Challenging the S-Curve: "Patterns of technological substitution" (Datee, Druid Summer Conference on Appropriability Proximity Routines and Innovation, 2007) available at http://www2.druid.dk/conferences/viewpaper.php?id=1605&cf=9

11 The figure of Aggregator helps to design and improve business by extending legal rights from Studios, devising a digital strategy and supporting Operators in assets processing, general operation and management and marketing support.

12 Agreement final figures are subject of negotiation. In the case of new releases, the Studio's share might be bigger.

13 Modelization has been devised only for the first 3 years. That is way the typical S-shape flattening is not noticeable yet.

14 "How Netflix built the new coach potato" (Geenfield, Atlantic Wire, April 2013) available at

http://www.theatlanticwire.com/technology/2013/04/netflix-arrested-development-money/62293/

15 "Understanding User Behavior in large-scale VoD systems" (Yu, Zheng et al, EuroSys 2006) available at https://www.cs.ucsb.edu/~ravenben/publications/pdf/vod-eurosys06.pdf

16 In my opinion it is almost impossible to fulfill these three conditions at the same time: good quality content, legal, for free. There might be exceptions, only for short period of time, non sustainable. Cuevana was one of these exceptions.

17 "Cuevana: the End? (Conti, RapidTV News, Nov 2011) at

http://www.rapidtvnews.com/index.php/2011113017494/cuevana-the-end253.html

19 Power Purchase Parity (PPP or GDP per capita) taken from "World Fact Book" (2011) available at

https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004 rank.html

20 "Argentina's Black Market Peso Weakens To ARS8.75" (Turner, The Wall Street Journal, July 2013) at http://online.wsj.com/article/BT-CO-20130716-713004.html

21 "The purchasing power debate" (Taylor & Taylor, Journal of Economic Perspectives, 2004)

22 It is interesting to notice that Claro acquired in 2011 DLA, a well-known Latam aggregator. Since then it was developed a VoD platform called Neon. In consequence both the content and the platform -relatively unexpensive are imposed to all Claro operators, allowing no possible differentiation.

23 Antel is the local government owned, with revenues of about 2% of Uruguay's 2011 GDP, and about 95% of penetration in the telephone and data services.

24 "Ultra high definition: state of the industry" (CEA market research, July 2013) available at http://www.ce.org/News/News-Releases/Press-Releases/2013-Press-Releases/CEA-Releases-Report-on-Ultra-HD.aspx

25 "Content is not king" (Odlyzko, First Monday, February 2001) - available at

http://firstmonday.org/ojs/index.php/fm/article/view/833/742

 $26 \text{ ``Netflix Gambles on Big Data to Become the HBO of Streaming'' (Robert Baldwin, Wired Magazine, 2012) available at $$ $$ http://www.wired.com/gadgetlab/2012/11/netflix-data-$

gamble/?utm source=twitter&utm medium=socialmedia&utm campaign=twitterclickthru