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# Power and control strategies in online video services

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**Abstract.** In the emerging market of online video services, new media entrants and traditional gatekeepers are making efforts to reinvent the dominant modes of video supply and consumption while fighting for market power and customer lock-in. This article studies, through a number of U.S. and European online video services, two different groups of strategies employed by stakeholders to control their gatekeeper position and build up or maintain market power. It is suggested that traditional media gatekeepers typically engage in strategic alliances and mergers and acquisitions to establish new services and build a stronger power and bargaining position towards upstream and downstream players. In addition, copyright and IPR disputes are also being used to deter online content aggregators, which depend on content producers and broadcasters' resources. Finally, online content aggregators are building strategic alliances with CE vendors in order to quickly enter a new distribution outlet, benefit from network externalities and build market position.

**Keywords:** Online video, online television, VOD, TV Everywhere, business model, power, alliances, mergers and acquisitions.

## 1 Introduction

Broadband penetration and mobility are contributing to the massification of video consumption, while at the same time causing great impact on the sustainability of the media industries and related content services. Online video consumption growth (about 60% of today's network traffic) has indeed been greatly assisted by the availability of connected devices (computers, smartphones, tablets, game consoles, etc.) and the growth of high-speed Internet connectivity allowing consumers to download and/or stream their preferred content anywhere. Of course, this would not have been possible if digitalisation of content had not been attained. Digitalisation has transformed the delivery of virtually all media products (Kung et al., 2008) and has had a tremendous impact on all stages of the media value chain. The Internet has often been presented to the media industries as a new distribution channel for the delivery of both new and old content therefore enabling the emergence of new services, markets and business models. Instead of being just an additional distribution channel, however, the Internet requires a full transformation of legacy business models deployed by the media industries. Hence, media firms need to find an appropriate response to the structural and strategic changes posed by the Internet (Doyle, 2013; Kung et al., 2008).

In this multi-screen environment, TV broadcasters and traditional cable/satellite operators obviously no longer control the audiovisual ecosystem. A range of new devices and services — digital media players, game consoles, DVRs, PVRs, DVD and Blu-Ray players — increasingly serve as the dominant interface between the online video supply and the TV set. For example, Apple TV or Roku devices allow viewers to have access to iTunes store (download-to-own) or Netflix (streaming) directly on TV screens. Sony DVD and Blu-Ray players support streaming content from Video on Demand (VOD) platforms such as Hulu or Amazon Instant Video, as well as, directly from Web pages with a built-in browser. Smart TVs also add up to the convergence trend between computers and TV sets. These devices have integrated Internet-access capabilities and, among others, enable access to on-demand and catch-up TV services. As a result of media convergence into a wider ICT ecosystem (Fransman, 2010), the relationship of the consumer with TV is changing. While, especially

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in the US, many consumers have cut the cord with their pay-TV operator to exclusively enjoy video content delivered through the Internet, others expect content to be everywhere anytime. An increasing number of services allows viewers to watch TV content over the Internet either offline (catch-up TV, video on-demand) or live (TV Everywhere, place-shifting) and on mobile devices and computers.

These new services show how new media entrants and traditional gatekeepers are making efforts to reinvent the dominant modes of video supply and consumption while fighting for market dominance and customer lock-in in the online video ecosystem. The paper therefore studies, through a number of online video services, the (inter-firm) strategies that the different market players are employing to build up or maintain market power (e.g. acquisitions, mergers, alliances) or to reproduce scarcity circumstances to preserve their competitive advantage (e.g. copyright and intellectual property rights infringement, patent wars). Such broad analysis of the interactions between the different stakeholders in the online video ecosystem is rather new since most studies focus on the fights between two particular players (e.g. Evens and Donders, 2013; Kim, 2012; Artero, 2010; Waterman et. al, 2013). The outcome of this mainly qualitative analysis, borrowing theoretical and complementary concepts from political economy, innovation theory and media economics, will allow for a deeper understanding of the current strategies of power and control being employed in online video services. The purpose is to provide an analytical framework for addressing power and control issues in the online video ecosystem and to study the evolution of relationships between stakeholders.

Section 2 provides a literature overview, introducing theoretical concepts related to the analysis of power and control in the media market. A number of inter-firm strategies are identified that lead to building market dominance, deterring new entrants and preservation of competitive advantage. Section 3 clarifies the definition of online video services, identifies the key stakeholders in this ecosystem and discusses the business models and content offered on a number of online video services from both Europe and U.S.. Section 4 overviews cases that highlight the use of the strategies previously identified. Finally, concluding remarks are conveyed.

## **2 Power and Control Issues**

### **2.1 From scarcity to market dominance**

Much of the discussion on power and control issues in the media sector is rooted in the political economy tradition. The political economy of communication traditionally focused on questions related to commoditisation and processes of scarcity created in content production and media consumption (Garnham, 1979; Smythe, 1960). With telecommunications diffusion and Internet massification, other issues have been brought into the discussion, namely market dominance and monopolisation. The emphasis turns to the circumstances that originate certain structures of power and their consequences for consumers and citizens (Mansell, 2004). Although technological innovation is said to create abundance of new services, at the same time, monopolisation strategies create the appearance of scarcity (Mansell, 1993; Mansell, 1999). These monopolisation strategies refer to “the activities of firms (usually dominant ones) who are seeking to build up, or maintain, a position of market power” (Clark, 1961, p. 21 cited in Mansell, 1997, p. 971). For instance, telecom operators have always controlled the key points in communications infrastructure, i.e. adopting the role of access ‘gatekeepers’, as well as, controlling the development of the market. But also in the new ICT ecosystem, monopolisation strategies aimed at controlling access to networks and/or electronic information products and services exist, as is the case of set-top boxes/digital media players which are needed to access video content (Nicita and Rossi, 2008), while locking-in customers in the service or platform with guaranteed revenues. Furthermore, complex copyright clearance procedures prevent access to and reproduction of content in certain geographical markets providing another mechanism for monopolisation of content (often accompanied by piracy effects) and for firms to secure their positions in the market.

In the digital age, power positions in the ecosystem strongly depend on who controls key ‘control points’ or ‘bottlenecks’ of the communications infrastructure or services. Firms make use of several

strategies in order to monopolise existing and new markets through ownership or control of infrastructure and/or content, or by trying to enter new sectors increasing the scale of their operations through diversified strategies of acquisitions and alliances with other stakeholders (Mansell, 1997). These strategies are crucial factors in establishing competitive advantage, while also enabling stakeholders to acquire market and customer information, which may become important sources of market power. These monopolisation strategies also contribute to raise the entry barriers for new players in the market. Other commercial strategies, quite popular in the Internet, which consist in bundling services or establishing pay walls, also give scope to the establishment of power relations with consumers. Therefore, regulation and competition policy are important tools to ensure that competition in the market prevails as well as to keep the market open to new players (Mansell, 1997). Effective regulation will be increasingly difficult as firms' strategies involve more and more partnerships, alliances, acquisitions and mergers with suppliers and competitors in order to dominate the 'control points'.

## **2.2 From Copyright Infringements to Patent Wars**

As will be addressed later, online video services strongly rely on branded content produced, aggregated and distributed by long-established firms in the media industry. These players are accustomed to a model where 'scarcity' prevails, with high access barriers, high costs and highly controlled production and distribution streams (Hutchins and Rowe, 2009). The Internet and the online model, significantly lowers access barriers and costs, for all players, even for the established ones in the media industry, allowing a growing number of players to appropriate, modify, and share digital content. However, as many scholars argue, the media industry incumbents fear losing their market power and make use of exclusive copyrights management and development of technical standards to reinvent scarcity and bottlenecks (Mansell, 2004; Kung, 2008; Evens, 2010). Nelson (2013) depicts how the video industry maximises revenue and profits via windowing. Windowing refers to the strategy of releasing an audiovisual work on different platforms (pay-TV, free-to-air, catch-up, SVOD, TVOD, DVD), over a period of time, usually with discrete periods of exclusivity and variable pricing. Since these windows limit the availability of content supplied to consumers, illegal offerings (piracy) form a big threat to this profitable strategy, and erode the monopoly position of content owners.

At stake is the ownership and control of media content in order to generate a continuous stream of revenues and maintain profits. Furthermore, media firms are trying to enter potential lucrative online video market delivering content and establishing a direct connection with the consumer. Several copyright management models are currently being challenged by the online model. Content providers usually ensure exclusivity and property rights depending on the transmission platform (e.g. retransmission rights), on the temporal distance from theatrical show (e.g. movies), with hardware/software copy control mechanisms (e.g. DRM mechanisms) and/or with territorial broadcast restrictions (e.g. sports). In recent court cases of copyright infringement in the online video market, content producers (e.g. sports associations), content distributors (e.g. movie studios) and broadcasters stand out as central stakeholders pursuing a control strategy to protect their market position and preventing entrants to use digital content to launch new services.

Patents and IPR are increasingly being used not only to deter competitors from developing similar technologies, but also to delay the deployment of competitors' technologies (Melody, 2013). The term 'patent troll' started being used to identify entities that not make or sell anything. They just inhibit innovation and economic growth by adopting a behaviour of looking for violations and then pursuing litigation and licensing agreements. The recent famous 'patent war' between Apple and Samsung lead to both companies litigating in more than 50 countries for patent infringement in the design of smartphones and tablets. With different courts deciding in favour of one or the other firm, this battle has yielded mixed results, including dismissals, product bans, and financial compensations.

## 2.3 From strategic alliances to mergers and acquisitions

The spread of digital technology in the past decades has affected corporate strategy and contributed to the spread of cross-sectoral ownership (especially between IT, telecommunications and media companies) with several goals, among which, reduce competition, gain access to resources or restricted markets, quick market entry, achieve vertical integration, maintain market dominance, establish industry standards, exploit economies of scale and scope, increase negotiation leverage, and prevent overcapacity in the market (Chan-Olmsted, 2004; Doyle, 2013), can be highlighted.

Digitalisation, media convergence and deregulation have spurred media-related firms to engage in alliances, mergers and acquisitions strategies. This has increased concentration in traditional TV broadcasting and distribution markets. Several studies have focussed on efficiency gains, risk spreading, shareholders wealth and their effects on firms and their internal organisation (Chan-Olmsted, 1998; Peltier, 2004; Shaver and Shaver, 2002). However, the focus of this analysis is on how firms use integration strategies towards dominant market positions. In addition to efficiency gains, integration strategies are found to create anticompetitive effects such as a raise in rival's costs, entry-deterrence and market foreclosure for new entrants. They are often strategically used to create or exploit market power by raising entry barriers or allowing discriminatory behaviour (pricing) between rivals and affiliates (Waterman and Choi, 2011).

Sheth and Parvatiyar (1992) developed a typology for business alliances based on two constructs: (1) the purpose of the business alliance (strategic versus operations) and (2) the parties involved in the business alliance (competitors versus non-competitors). In their view, a business alliance is "an ongoing, formal, business relationship between two or more independent organizations to achieve commons goals" (Sheth and Parvatiyar, 1992, p. 72). The dichotomy strategic-operations focuses on the corporate purpose the alliances intend to fulfil. Strategic alliances purposes (e.g. growth opportunity, diversification, strategic intent and protection against external threat) affect firms' future position and competitiveness, while operational alliances purposes (e.g. asset utilisation, resource efficiency, enhancing core competences and bridging the performance gap) are intended to impact corporate efficiency and improve the current position of a firm. Along with the alliance purpose, the parties in an alliance and their role form the other dichotomy in this typology. Customers, suppliers, as well as, potential customers and suppliers are considered non-competitors. Existing competitors, new entrants, substitute producers (indirect competitors) and potential competitors are competitors. Given these two dimensions, Sheth and Parvatiyar (1992) typology consists of four types of business alliances: (a) cartel, a business alliance formed for operations efficiency among competitors; (b) co-operative, a business alliance for operations efficiency among non-competitors; (c) competitive alliance, a business alliance for a strategic purpose among competitors; finally, (d) collaborative venture, with a strategic purpose among non-competitors. As the authors mention, many authors have started to use the term "strategic alliance" as a common term to refer to all types of business alliances, independently of their purpose. Still, in the context of this analysis the focus is on strategic alliances as per Sheth and Parvatiyar's typology. Strategic alliances may be governed through many forms, from specific functional agreements – licensing, R&D consortia, strategic cooperative agreements – to joint ventures, and to the ultimate form of mergers and acquisitions (Sheth and Parvatiyar, 1992; Chan-Olmsted, 1998; Ariño et al., 2001; Todeva and Knoke, 2005).

Mergers and acquisitions (M&A) deals can usually be related to strategies to create or reinforce market power and generate greater economic efficiency (through economies of scale and scope). In this period of technological change and deregulation, M&A became a popular tool to generate media giants, e.g. Comcast, News Corporation, Bertelsmann. To quickly establish a presence and leadership in an existing market are important incentives for many firms pursuing M&A activities (Chan-Olmsted, 1998). But M&A is also often seen as the best opportunity for firms to grow and implement new technologies with combined resources in a short time, while capturing an already developed customer base (Chan-Olmsted, 1998). In addition, media and telecommunications firms have been considering cross-industry mergers as an opportunity to obtain resources for new technologies and new markets. Finally, as a result of increasingly blurry boundaries between media, telecommunications and IT sectors and the growth of global multimedia conglomerates, M&A allows firms to compete multilaterally in several media markets and multiple countries concurrently (Chan-Olmsted, 2004).

Peltier (2004) focuses on the analysis of M&A deals in the context of media industries and highlights a number of goals specifically related to the sector and to issues of power and control: (a) control access to a scarce resource, i.e. content; (b) ensure access to distribution networks for content; (c) research of size effects, i.e. economies of scale and scope; and (d) increase the international distribution of products. Shaver and Shaver (2002) also identify M&A as a tool of diversification for non-media firms in the media industry in order to have a stance in the media sector.

Peltier (2004) summarises a typology of M&A into five types, which can have simultaneously operations and strategic purposes: horizontal concentration, upstream vertical integration, downstream vertical integration, diversification and conglomerate. As noted, in practice, in one deal, one or more strategies can be applied. Horizontal concentration occurs in deals with firms in the same industry, which produce identical or similar products, and gives the new firm the possibility of achieving economies of scale and increase market power vis-à-vis its suppliers. Upstream vertical integration involves a downstream firm (e.g. a content distributor) acquiring an upstream firm (e.g. a content producer), in order to guarantee access to content. On the contrary, in downstream vertical integration, a content producer may wish to ensure an outlet for its content by acquiring a downstream firm. Vertical mergers are mainly motivated by market foreclosure, in order to secure resources, and weaken competitors by reducing their supply of content/inputs or their options to sell. Diversification occurs when a certain firm enters a different business, but somehow related to its own businesses. Finally, a conglomerate strategy is characterised by a firm entering a business unrelated to its own businesses.

Table 1 summarises the typologies described above for strategic alliances and their different forms.

**Table 1 - Forms of strategic alliances**

Parties	Types of strategic alliances	Forms of strategic alliances	
Competitors	Competitive alliances	Functional agreements	
		Joint ventures	
		M&A	Horizontal concentration
Non-competitors	Collaborative ventures	Functional agreements	
		Joint ventures	
		M&A	Upstream vertical integration
			Downstream vertical integration
			Diversification
			Conglomerate

### 3 Online Video Services

#### 3.1 Definition

The development towards multi-screen consumption is often classified under the buzzword Over-The-Top (OTT) video. In literature, OTT refers to video delivery by an Internet platform (e.g. Hulu, Netflix) that controls content distribution, but differs from a traditional gatekeeper, a broadcaster or an ISP/telecom operator (Henten and Tadayoni, 2012; EC, 2013). Nevertheless, OTT services piggyback on an Internet broadband provider's network for delivery. According to the European Audiovisual Media Services Directive (AVMS), most of the OTT video services would thus fit under the definition of on-demand audiovisual (i.e. non-linear) media service as a service "provided by a media service provider for the viewing of programs at the moment chosen by the user and at their individual request on the basis of a catalogue of programs selected by the media service provider" (EU, 2010, p. 12). One could say that this definition highlights the anytime, anywhere and on any device (Moyler and Hooper, 2009) that characterises OTT services from a user's perspective.

However, at the same time, there are currently many examples of traditional TV broadcasters and pay-TV operators (FTTH, cable, satellite, etc.) making vibrant efforts to also bring live broadcasting to the online context. Many broadcasters make available on their website or through a specific

application the live feed of their TV channels, as well as, a catch-up service allowing viewing of the past days' programmes. Pay-TV operators have also launched platforms in which subscribers are able to watch online the same or a limited selection of the channels composing their subscription. In the context of the AVMS, catch-up TV services fit under the non-linear audiovisual media service definition, while live streaming is considered a linear audiovisual media service, i.e. television broadcast.

The recent European Commission's Green Paper on Preparing for a Fully Converged Audiovisual World discusses "the progressive merger of traditional broadcast services and the internet" and the way they are consumed and delivered, while referring to OTT players as providers of "online audiovisual content without themselves being electronic communications services and network providers" (EC, 2013, p. 3).

Therefore, in this analysis we have chosen to broaden the definition of OTT and focus on online video services to refer to video distribution using the Internet Protocol (IP) over a public network, i.e. the Internet with unmanaged Quality of Service (QoS). The focus, however, will be on free or paid services, which distribute professionally produced content, independently of the technological platform and the type of player (broadcaster, pay-TV operator, Internet player, etc.) the customer builds a relationship with. By only considering the public network in this definition, services such as IPTV over service providers' private networks are therefore excluded.

Therefore, online video services include platforms that allow consumers to shift content in time, for watching at a more convenient moment, such as VOD platforms (e.g. Hulu or Netflix) and catch-up TV (e.g. BBC's iPlayer). Broadcasters' live TV streaming platforms as well as platforms that allow shifting the TV service to other regions and devices beyond the TV set are also to be considered. The latter includes place-shifting services, such as Slingbox or Aereo, as well as TV Everywhere services (e.g. AT&T's U-Verse and Comcast's Xfinity TV). The TV Everywhere concept was jointly announced by U.S. cable providers Comcast and Time Warner in 2009 and refers to pay-TV operators' authenticated aggregation of online television programming for free (as part of the subscription). It allows for validation of the subscribers and their corresponding subscribed services, and gives access to video programming on a variety of fixed and mobile Internet-connected devices.

Most of these services rely on professional content supplied by traditional content producers and content distributors, consisting predominantly on an aggregation of commercial TV programming. Most VOD and catch-up services make available films, series, sports events and specific TV-programs from broadcast networks.

### **3.2 Main Stakeholders and Business Models**

In this analysis, the online video industry is considered to be composed of the following stakeholders: content producers, content providers, broadcasters, pay-TV operators, Internet service providers (ISPs), online video providers, device manufacturers and, finally, consumers/subscribers. These stakeholders represent the different stages of the media value chain through which online video content is created, distributed and consumed.

Content producers, such as HBO and Disney, develop and produce digital content and own the content rights. Next, broadcasters, commercial or public, premium and free-to-air, redistribute content to a mass audience, but might as well be content producers themselves. Broadcasters usually derive income from licence fees and advertising. Pay-TV operators package TV channels in one or several types of subscriptions served to the consumer. Pay-TV operators (FTTH, cable, satellite) normally pay retransmission fees to broadcasters. ISPs own network infrastructure that is used to deliver digital content over the Internet. Many ISPs (typically the traditional telecom operators) across Europe have aggregated their offering under a triple or quadruple-play service, offering a broadband connection together with a television package. Online video aggregators offer video content by means of the Internet and establish their activity through a platform aggregating and repackaging content from content producers and broadcasters. These players are to be distinguished from broadcasters or pay-TV operators that have taken their footprint online. Consumer electronics vendors sell devices (e.g. smart TVs, consoles) or other appliances such as set-top boxes that allow consumers to get access to

linear TV, VOD and/or catch-up TV services. Consumers need a broadband connection to receive video content and in some cases a subscription or to make a one-time payment.

**Error! Reference source not found.** offers a view of the type of stakeholders that have launched or are the main investors of online video services, based on examples collected and to be discussed in the next section. Many of these services are operated by content producers and broadcasters, but there is a growing trend of stakeholders that do not own content or content rights to enter in this market. Pay-TV operators are making use of their direct commercial relationship with customers to leverage their position in the ecosystem. Content producers such as Disney, Sony (also a CE vendor), U.S. Major League Baseball (MLB) offer their own content as live streaming, catch-up and VOD on their portals or specific apps. Many European and U.S. broadcasters offer (a limited view of) their live stream on their portals and a big number of broadcasters have also made available applications for different types of devices providing live, catch-up and VOD content. Many pay-TV operators have recently launched their TV Everywhere platforms for different types of devices offering both live content and selected previously aired shows, as well as, VOD content such as movies on a pay-per-view basis and the possibility to record content. Many of these platforms can only be used within the operator's network at home or through operator's hotspots (such as MEO's GO and Telenet's Yelo TV) and, in some cases, outside the operator's network for an additional fee. Online video aggregators mostly offer a catalogue of VOD content such as movies and TV series (e.g. Netflix, Yahoo! Screen, etc.) or live TV through place-shifting services on the cloud (e.g. Aereo, Nimble TV). CE Vendors, such as Apple, Sony, Sling Media or Belkin offer VOD platforms and access to live TV through appliances such as Slingbox or @TV Plus.

There are broadly five prevalent types of business-models supporting these services: subscription, pay to download or pay to rent, hardware acquisition, TV package subscription, and advertising. Table 3 identifies the business models for a number of services that will be discussed in the following section. The portfolio of services on offer in the U.S. market is, at the moment, rather big when compared to individual European countries. Except for a few VOD services, most of these services are provided on a national basis and did not yet become global (partly due to copyrights). Many services are offered on a monthly or yearly subscription only or on a combination of advertising and subscription models. Upgrade to a subscription may offer different functionalities: from removing advertising to offering access to full-length content, or accessing the same content in high-definition quality, or unlimited viewing of content, or allowing recording of live content. Other services, typically VOD, offer a kind of pay-per-view model for a specific content item (movie, a full episode series or a particular episode), which evolved to two distinct models: pay-to-download and pay-to-rent. The first model requires a one time payment to download and watch anytime and as many times as wanted, while the latter model requires a one time payment to rent and watch within a limited period of time. Place-shifting services, which are hardware-based, require buying the appliance and downloading a paid application for each connected device (smartphone, tablet). TV Everywhere services are generally offered for free, provided that verification of the pay-TV package is successful.

As presented in Table 3, online video services mainly aggregate content from public and commercial broadcasters and from multiple content producers. TV Everywhere and place-shifting services mostly present linear TV (and in specific cases, only free-to-air channels) and may be seen as competing with each other. VOD services and catch-up services compete with each other for previously aired shows or series, and in some cases, for movies. Most VOD services partner with a number of content producers, while some only offer content produced by their corporate owner.

With a focus on offered content, it can be argued that TV-pay operators are at the risk of losing subscribers (i.e. cord-cutters) if they do not lower the price of their offers, since a combined purchase of a place-shifting service and a VOD service could make up for the whole content delivered by a TV-package. In addition, consumers would have access to a more flexible and targeted combination of content they are willing to watch, instead of a broad range of content they would never watch. Therefore, one could contend that broadcasters and content producers currently still hold a gatekeeper role for content, while pay-TV operators can be displaced by online video aggregators or a combined effort between online video aggregators and CE vendors.

**Table 2 – Stakeholders and services in the online video ecosystem**

	Content	Broadcasters	Pay-TV	Online	Video	CE Vendors
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	Producers		operators	Aggregators	
<b>Catch-up TV</b>	X	X	X		
<b>VOD</b>	X	X	X	X	X
<b>TV Everywhere</b>			X		
<b>Place-shifting</b>				X	X

**Table 3 - Online video services business models**

	Primary content	Business Model
<b>Catch-up TV</b>		
BBC iPlayer	TV broadcast content	Advertising + Subscription
<b>VOD</b>		
Hulu (Plus)	TV shows, movies	Advertising (+ Subscription)
Netflix	TV shows, movies	Subscription
iTunes Store	TV shows, movies	Pay-to-download + Pay-to-rent
Google Play Store	TV shows, movies	Pay-to-download + Pay-to-rent
Amazon Instant Video	TV shows, movies	Pay-to-download + Pay-to-rent + Subscription
Crackle	Sony-produced TV shows and movies	Advertising
Blinkbox	TV shows, movies	Pay-to-download + Pay-to-rent
Wuaki.TV	TV shows, movies	Pay-to-download + Pay-to-rent + Subscription (catalogue selection)
<b>TV Everywhere</b>		
Yelo TV	Live TV broadcast, TV shows, movies	Free for TV package subscribers
Xfinity	Live TV broadcast, TV shows, movies	Free for TV package subscribers
MEO GO	Live TV broadcast, TV shows, movies	Free for TV package subscribers; Subscription
TWC TV	Live TV broadcast, TV shows, movies	Free for TV package subscribers
<b>Place-shifting</b>		
Slingbox	Live TV broadcast	Hardware + App
Aereo	Live TV broadcast	Subscription
@TV Plus	Live TV broadcast	Hardware + App
FilmOn	Live TV broadcast, movies	Advertising + Subscription

## 4 Stakeholders' strategies

### 4.1 Copyright and intellectual property infringement

In recent years, broadcasters pursued several battles with pay-TV operators fighting for retransmissions fees, but also for a gatekeeper position, once they realised they were loosing their direct relationship with the customer to pay-TV operators. With the current hype of online video services, broadcasters turned their attention to these new providers, while also trying to position themselves in the business ecosystem. At stake are litigations about whether streaming of broadcast television content violates copyright laws and whether this new type of online video providers would need a license to broadcast TV and/or to pay retransmission fees to broadcasters. Content producers are as well positioned against these services and argue for compensations for retransmitting their content.

Place-shifting service Aereo was launched in March 2012 and was promptly sued for copyright infringement by broadcasters. Aereo lets users watch over-the-air live TV channels and local channels. Aereo claims to host in the cloud tiny HDTV antennas, one for each of its customers, which are connected to DVRs, allowing users to schedule recordings for later viewing.

Before Aereo started operating, TV broadcasters Twentieth Century Fox, Fox Television, Univision, PBS, and two local New York TV stations filed a preliminary injunction in March 2012 against Aereo for copyright violations due to unauthorised rebroadcast and reproductions, as well as unfair competition. Broadcasters raised concerns that Aereo would be competing with broadcasters' Internet platforms. A second suit, also for copyright infringement, was filed by ABC, Disney, CBS, NBCUniversal, Universal Network Television, and Telemundo. Aereo won the two suits on the grounds that each antenna functions independently and that transmissions of unique copies of broadcast television programs created at its user's requests and transmitted while the programs are still airing on broadcast television are not infringing the public performance right (Albanesius, 2012). Regarding DVR functionalities, these were also not considered copyright infringement based on a decision of a previous battle between content producers and Cablevision, which established the legality of Cablevision's Remote Storage DVR service (Albanesius, 2012; Sweeting, 2013). But broadcasters have taken this to the U.S. Supreme Court and still awaiting decision. In essence, with these suits, broadcasters are worried that Aereo is gaining access to content for free and undermining their business model. As broadcasters and content producers' business model strongly relies on licensing content to pay-TV operators, Aereo is seen as getting away with their content for free. Broadcasters are also afraid of losing bargaining power with operators and achieving worst licensing deals, as operators would probably refer to Aereo as a free-rider. In addition, broadcasters also suggest that Aereo could change content, omit content or add its own ads on top of the content, and thus profit from something it did not own rights.

FilmOn X is another place-shifting service, which is modelled according to Aereo, i.e. works exactly the same in capturing TV signals with tiny antennas and distributing the signal to each user. However, FilmOn X has not enjoyed the same legal success as Aereo, despite the similar arguments made by plaintiffs and defendant in the Aereo cases (Lanza, 2014). Fox and other broadcasters filed suits against FilmOn X in California and Columbia districts. Both courts found that FilmOn X violated broadcasters' right of public performance because it retransmitted copyrighted works to members of the public without broadcasters' prior permission.

Slingbox, another place-shifting service launched in 2005, also presented legal questions regarding content rights. Slingbox is a device which connects both to a video source (e.g. DTT antenna, cable/satellite/IPTV set-top box, DVR, Blu-ray player) and to an Internet connection through a home network router. Receives a video signal from the source and then transmits it over the home network and out across the Internet, allowing a Slingbox owner to view the transmitted content remotely on an Internet-enabled device (computers, smartphones, tablets, etc.) using SlingPlayer application. When launched in the U.S., Slingbox was particularly appealing to sports fans since it allowed watching sports events the user would not be allowed to in its region, thus circumventing geographical boundaries written into broadcast rights deals. U.S. sports leagues hold proximity controls, which enable them to restrict the distribution of content by region and broadcast time. However, rights holders have reacted differently to Slingbox technology. On one side, MLB was one of the fiercest opponents and even tried, albeit unsuccessfully, to obtain licensing fees from Sling Media (Yakovee and Crosner, 2007). On the other side, National Hockey League (NHL) was one of the first content producers to partner with Sling Media to offer content through the platform Clip+Sling.

These litigations intend to deter new players to enter the media ecosystem and launch new services, while also securing producers and broadcasters positions as gatekeepers of digital content. While producers and broadcasters are trying to build a role in the online video ecosystem through their own streaming portals, catch-up and VOD services, they are also on the lookout for new sources of revenue to fund digital production and counteract losses in advertising revenues. Fearing losing their power position, producers and broadcasters might choose to impose new (or old) copyright management models on new entrants and gather the corresponding revenues, or let entrants starve of content in order to eliminate potential competitors.

With respect to patent infringement, Sling Media filed U.S. against competitors Belkin International, Inc., Monsoon Multimedia, Inc. and C2 Microsystems, Inc. alleging these companies unlawfully import and sell products that infringe six patents related to place-shifting and/or display replication functionality. These patents describe no more no less the technology used in Slingbox. In this case, Sling Media strategy seems to intentionally damage competitors' image as well as prevent Belkin and Monsoon from marketing Slingbox's competing products. Sling Media requested the court

to halt “the importation, sale, offer for sale, marketing, advertising, or solicitation of customers of electronic devices” having place-shifting functionalities that infringe the referred patents. Before the court issued a decision, Sling Media announced that it has agreed to drop patent accusations against Belkin, without giving further details on the settlement (Baumgartner, 2013). Later in 2013, the U.S International Trade Commission issued an import ban on products from Monsoon Multimedia Inc. and C2 Microsystems Inc. that it found to violate video place-shifting patents held by Sling Media Inc. (ITC, 2013).

This strategy suggests Sling Media intends to distort intellectual property processes as documented in literature. As Melody (2013) describes, it is now common practice that IPR is obtained not to develop a technology but rather to prevent competitors to develop similar technologies. Strategic delays are induced on competitors’ technologies by establishing potential claims while at the same time promoting one’s own technology.

## **4.2 Strategic alliances**

In this section, a number of examples will be discussed following the topology of strategic alliances previously presented in Section 2.3 – Table 1. We distinguish between competitive alliances, which take place among competitors, and collaborative ventures between non-competitors. Although the line between competitors and non-competitors can be rather thin in the online video market, we use the definitions given by Sheth and Parvatiyar (1992). The first group encompasses existing competitors, new entrants, substitute producers (indirect competitors) and potential competitors, while the second group includes customers, suppliers, as well as, potential customers and suppliers.

### **4.2.1 Competitive alliances**

Competitive alliances can take the form of agreements, joint ventures and horizontal concentration. An example of agreements between competitors takes place within VOD service suppliers. Apple, Google and Amazon all compete in VOD platforms (respectively, iTunes Store, Google Play Store and Amazon Instant Video) for buying and renting movies and TV shows. These giant players also compete in the media player segment with Apple TV, Google TV and Amazon Fire TV, allowing users to watch VOD content on their TV sets. Obviously, all these media players can play digital content from their respective VOD platforms. However, for instance, Apple reportedly blocked at some point other content aggregator platforms, like Hulu and Amazon, from being available on Apple TV. Interestingly, over the past years, these players have partnered and have been adding support to competing VOD platforms on their media players. For instance, Apple TV supports competitors Netflix, Hulu Plus and Crackle; Google TV supports Netflix and Amazon Instant Video; Amazon Fire TV supports Netflix, Hulu Plus and Crackle. So the more content can be accessed, consumers value more these devices and, consequently, more devices are sold. In Apple’s TV case, it is said that Apple gets a percentage of each subscription to Hulu or Netflix that takes place through the device and keeps customer and billing information. All in all, by opening devices to other VOD competitors seems to allow Apple, Google and Amazon to increase their revenues through increased devices’ sales, explore economies of scale and hold a direct customer relationship, while keeping a gatekeeper position towards the goals of reaching market dominance and customer lock-in. For content aggregators, as these devices get more popular, it becomes increasingly important to target these additional distribution outlets and benefit from network externalities.

As for joint ventures between competitors, Hulu is a good representative case of such strategy. The Hulu venture was established in 2007 by NBC and FOX, and later joined by Disney (ABC) and Providence Equity Partners. As Comcast inherited a 32 per cent stake in Hulu when the cable operator purchased control of NBC-Universal in 2011, NBC agreed to become a silent partner in Hulu’s operations for seven years, as part of the federal approval of the merger. In 2012, Providence sold its 10 per cent stake in Hulu. Hulu’s ownership structure has become complex, with three TV networks financially controlling the company, but with only FOX and Disney in operational control. It is remarkable that three closest rivals have cooperated in establishing an online video platform, and that

their venture got even stronger in 2012. By then, the Hulu venture was put for sale but despite bids from interested parties including Google, Amazon, Yahoo, DirecTV and AT&T, all three shareholders decided to call off the auction and invested an extra \$750 million in upgrading the platform to compete against other online content aggregators like Netflix and Amazon. This example shows that competitors have chosen to act together, rather than separately, to fight for their market position and against other online video services deployed by CE vendors (e.g. iTunes) or pay-TV operators (e.g. TV Everywhere platforms).

As for horizontal concentration, in February 2014 Comcast announced plans to buy Time Warner Cable (TWC) in a stock deal worth \$45.2 billion. Comcast is the biggest U.S. cable provider, while TWC is reported to be the second biggest cable operator. The acquisition, if approved, would establish Comcast as the dominant provider for broadband in the U.S., serving about 30 million TV subscribers. And therefore, give Comcast a stronger buying power towards content producers and broadcasters. Comcast would certainly engage in attempts to lower content prices and review current licensing agreements. Comcast can as well use its strengthened position to promote its NBC-Universal content, in detriment of other content producers. The merger would allow the new company to benefit from economies of scale, so one would naturally expect a decrease in consumer prices. Finally, the transaction might also give Comcast a stronger bargaining position towards online video aggregators, as these use Comcast's Internet 'pipes' to deliver content to end consumers.

Recently, in May 2014, also AT&T has announced to acquire satellite pay-TV provider DirecTV for \$48.2 billion. If the deal is approved by regulators, AT&T will control about 26 million subscribers, turning it into the second pay-TV provider, in case Comcast and TWC is also approved. If the two mergers happen, the individual power and bargaining positions of each new company towards their upstream and downstream players are likely to increase. In addition, the competition between the two new companies is likely to increase and AT&T will become stronger to compete with current's cable dominance. So far AT&T has offered a limited TV service in a limited number of states (5.7 million U-verse TV subscribers), while DirecTV has been unable to offer high-speed Internet packages to roughly 20.3 million subscribers. As announced in the press release, the merger would allow AT&T to offer triple-play bundle packages and directly compete with Comcast's pay-TV services portfolio.

#### **4.2.2. Collaborative ventures**

Regarding collaborative ventures, we have previously identified different forms, such as agreements, joint ventures, upstream and downstream vertical integration as well as diversification.

Sling Media, the owner of Slingbox devices, which allows place-shifting broadcast TV, entered into agreements with a number of other CE vendors to incorporate its SlingPlayer in a number of connected devices. While the Slingbox is connected to a video source (e.g. DTT antenna, cable/satellite/IPTV set-top box), the consumer then needs a SlingPlayer to watch captured TV broadcast in another device. Firstly available as an application for computers, then for smartphones and tablets, SlingPlayer has over the past three years moved to other connected devices. Sling Media has made agreements with TV-maker JVC and set-top boxes makers Boxee, Logitech Revue (for Google TV), Sony (for Google TV), Roku, Netgear, Apple and Western Digital to embed Sling Player in TVs, set-top boxes and media players. With these partnerships, Sling Media attempts to establish itself in the market and become the dominant player for place-shifting hardware. The same can be argued for UK's new entrant online video aggregator Wuaki.TV. Wuaki.TV stroke partnerships with TV manufacturers (Samsung, LG, Panasonic) to offer content directly from their smart TVs, as well as with Microsoft for Xbox. These partnerships are a quick way to enter a market that already has a good number of competitors and grow from there, while a direct relationship with consumers can be established. Consumers are likely to try a service that is already available on their TV than search for and try it on the Web.

A different outcome can be observed in the recent deals of Comcast and Verizon with Netflix. VOD service Netflix agreed to pay Comcast and Verizon for faster and more reliable access to the carriers' networks. This means that delivery of Netflix content to Comcast and Verizon's subscribers will likely improve in relation to other services. These agreements show the growing power of carriers

and how they have been able to leverage their position to players that depend on their infrastructure. But only the wealthier players will be able to pay for such deals and compete in this environment. In addition, not only carriers are building up their market, but are likely to get more subscribers (the ones that value Netflix above all) and lock them in. Finally, discussions are taking place on how this deal is threatening net neutrality rules, as Netflix is getting a preferential treatment.

YouView provides an example for joint ventures between non-competitors. YouView is a UK connected TV service offering access to terrestrial channels via Freeview (DTT) and Internet-delivered TV services (e.g. BBC iPlayer) via a hybrid set-top box connected with a broadband connection and/or television antenna. YouView is a joint venture created in 2010 with seven equal partners, including broadcasters (BBC, ITV, Channel 4, Channel 5), broadband providers (BT, TalkTalk) and DTT network infrastructure provider Arqiva – all partners financially committed to invest a total £126 million in the venture to cover the first four years of operation. Though they are all equal shareholders, BT and TalkTalk also use YouView to power their own pay-TV offerings. However, YouView aims to maintain the relevance of free-to-air television (via Freeview) without gatekeeping, therefore there is no subscription nor contract for accessing catch-up and Freeview content.

Upstream vertical integration involves a downstream firm acquiring an upstream firm, in order to secure important resources, such as content, and weaken competitors by reducing their supply. The acquisition of NBC-Universal by Comcast illustrates this case. By acquiring NBC-Universal, Comcast turned into a vertically integrated cable operator. However, concerns grew about the merger's potential anticompetitive effects as it would enable Comcast to restrict access to NBC programming available on Hulu and instead disfavour competing online video platforms to protect its own TV Everywhere service Xfinity. As the government was concerned that Comcast would try to impose restrictions on Hulu to protect its core cable business, it barred Comcast from being involved in Hulu's business affairs.

On the other hand, in downstream vertical integration, an upstream player acquires a downstream player in order to guarantee an outlet for its content and become a competitor in a new segment. For instance, RTL Netherlands has bought Dutch VoD service Videoland in order to serve its content in the VoD platform but also as an effort to compete with the arrival of Netflix to the Dutch market. RTL acquired 65% of the shares of Videoland's parent company The Entertainment Group (TEG) to become the largest provider of online movie content in the Benelux region. RTL said it would use the Videoland service to help launch a subscription-based service, which would give users unlimited access to international and Dutch movies and series for a fixed monthly fee. This acquisition will potentially help RTL to be positioned in the VOD segment and indeed intends to build up market position against a global player such as Netflix (which is meanwhile already available in the Netherlands).

In diversification strategies, a firm enters a different business, which is somehow related with its current business. Blinkbox is a UK VOD service launched in October 2007 with the backing of a number of venture capital firms. In 2011, UK's largest supermarket chain Tesco, acquired an 80% stake of Blinkbox from private equity investors Eden Ventures and Nordic Venture Partners. Initially, Blinkbox had both an advertising and a pay-per-view business models. Later, after Tesco's acquisition, Blinkbox adopted pay-to-download and pay-to-rent models and a new ad-based supported service (ClubcardTV) was created exclusively for Tesco's loyalty card members. An earlier incursion of Tesco into the media sector, has lead it to create an online DVD rental service. But, with Blinkbox's acquisition, Tesco has started to use this brand as a catch-all digital entertainment brand, launching ClubcardTV, Blinkbox music (music streaming service) and Blinkbox books (ebooks online shop), and has been able to position itself in several media segments.

## **5 Conclusion**

In the disruptive market of online video services, many services emerged in the past years, which are still taking shape and conquering market. The functionalities, content and business models that distinguish one service from another are blurred and intertwined. The same applies to the stakeholders in the value chain. Most traditional media stakeholders want to control a share of what used to be their

market and deter new entrants to achieve strong positions. However it has been difficult to deter giant global players such as Apple or Netflix, although they mostly depend on content produced by movie studios and broadcasters, because most traditional stakeholders' strategies take place on an national level, while the most powerful online video aggregators aim at international partnerships. Therefore many examples illustrate traditional broadcasters, content providers or pay-TV operators wanting to play several roles to build up market power, preserve competitive advantage or just lock consumers in their service portfolio. Borrowing the words from TV-Everywhere slogan, traditional media stakeholders are making vibrant efforts to be 'anywhere, anytime' in the online video value chain and gather revenues from new services.

This article focused on discussing two different groups of strategies stakeholders are using to control their gatekeeper position and build up or maintain market power: copyright infringement and patent disputes; and, strategic alliances and mergers and acquisitions.

In the first group, the online video services discussed illustrate how content producers and broadcasters stand out as central stakeholders pursuing a control strategy to protect their market position and preventing entrants to use digital content to launch new services. Fearing losing their power position, producers and broadcasters might choose to impose new (or old) copyright management models on new entrants and gather the corresponding revenues, or let entrants starve of content in order to eliminate potential competitors. Still, producers and broadcasters are also concerned with funding new content and therefore are also willing to pursue other strategies that allow them to develop new services and find new sources of revenue.

In the second group, a wider number of examples are analysed and distinctions are made between competitive alliances (among competitors) and collaborative ventures (among non-competitors). In competitive alliances, examples illustrate competitors (typically the traditional media stakeholders) venturing together to fight for their market position and against new services, as well as, competitors merging to increase their market dominance, benefit from economies of scale and build a stronger power and bargaining position towards upstream and downstream players. In collaborative ventures, vertical integration examples highlight, on the one hand, the importance to secure resources to maintain market power and weaken competitors, and on the other hand, the ambition to become a player in a new segment, using the resources and established position of a downstream player.

In both types of strategic alliances, one could argue that it is becoming increasingly important for online content aggregators (the new entrants of the media ecosystem) to partner with CE vendors (TV and set-top box makers) in order to quickly target another distribution outlet, benefit from network externalities and build market position. Although not fully explored in this article, one can also conclude that consumer electronics (smart TVs and set-top boxes) are being used to offer access to new services and control choices available to consumers and therefore creating a new 'control point' to exert market power. For instance, Apple agreed to add Netflix and Hulu to Apple TV only when it was able to secure customer data information and a share of consumers' consumption.

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