The television struggle: an assessment of over-the-top television evolutions in a cable dominant market.

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The Television Struggle: an Assessment of Over-the-Top Television Evolutions in a Cable Dominant Market (*)

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Abstract. Traditional television screens have lost their monopoly on television content. With a helping hand of digitalization, the introduction of ever more screens in our lives and increasingly faster network technologies, a wide variety of alternative screens and sources of television content are trying to conquer a piece of the audiences' viewing time. This evolution calls for new kinds of services and has the potential to change the current television market. This paper assesses the evolution of over-the-top television services in Flanders, a cable dominant market in which several OTT TV services emerged during the past two years. By presenting an analysis of the market and the results of a large scale end-user survey (n: 1,269) we provide insights on the future of OTT TV and its impact on the current television ecosystem. In the Flemish market, both traditional broadcasters, the channels themselves and new market entrants are launching OTT TV services. These market evolutions are being related to user expectations and usage patterns in order to assess the challenges for future television. This also allows to make assumptions on future scenarios regarding so-called "cord- cutting" behaviour. Because of the high adoption of triple play bundles and fierce competition between the two dominant television distributors, a large scale video cord-cutting scenario is highly unlikely for the Flemish television market. Although OTT TV might gain importance, it will be hard for 'OTT TV-only' services to replace the traditional television distributors.

Key words: over-the-top television, cord cutting, television market, cable television.

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For decades, the mainstream television business model was relatively stable and simple. Television channels acquired content further up the value chain, relied on proprietary transmission infrastructure or managed distribution deals with satellite and cable operators for passing on the programs to the viewers, and sold these viewers to interested advertisers. Basically, the media value chain was characterized by linearity and one-to-one relationships within the television market. In recent years, however, the television industry went through a fundamental transformation as a result of political, economic, social and technological developments. Whereas deregulation and liberalization allowed new competitors entering the production and distribution stage of the industry, digitization created a window of opportunities for innovative television services and disruptive business models (GIVEN *et al*., 2012). The widespread manifestation of the Internet as a global distribution network, stimulated by convergence between media, telecommunications and informatics, facilitated the provision of television programming over converged IP-networks. Driven by a customers' desire to watch television content on mobile devices, television distributors explore multi-screen television services (any program, any device, and any time) and launched 'TV everywhere' platforms (WATERMAN *et al*., 2012). As a consequence, the digital context of television production, distribution and consumption has evolved in a complex ecosystem, characterized by the emergence of (potentially) disruptive business models and a hypercompetitive environment that incumbent multichannel operators can hardly control (EVENS & DONDERS, 2013).

One of the most prominent changes in today's industry is the far-reaching integration between traditional broadcast content and broadband delivery platforms. Lowering entry barriers and guaranteeing global reach, the online market has created opportunities for new players and disruptive platforms (think of YouTube, Netflix, Hulu) to enter this traditionally closed TV ecosystem. Over-the-top television (OTT TV) aggregators now allow TV producers and broadcasters to go directly to consumers, bypassing traditional network gatekeepers and access providers (VENTURINI, 2011). These opportunities, however, also bring along strategic risks for each of the incumbents involved. As a result of the integration between broadband and TV, the traditional distribution logic might be disrupted and the operator's comfortable cash flows might run dry, eventually leading to a 'dumb pipe' scenario (providing simple bandwidth and network speed). In addition, broadcasters are looking suspiciously towards 'à la carte' services (e.g. Netflix) which destroy the bundled model in which distribution and payments were secured. Furthermore, original content creators and rights owners are

facing illegal distribution by peer-to-peer file sharing, with consumers replacing paid-for media by a 'free lunch' (MARSHALL & VENTURINI, 2012).

Given the wide array of options to access television content these days, and given the enormous speed of innovations provided to satisfy the customer's needs and requirements, viewers are constantly looking for the best 'value for money' available in the TV market. Popular advertising-supported platforms (Hulu, YouTube, BitTorrent), subscription-based services (Netflix, iTunes, Blockbuster) or tailored hardware boxes (Roku, Boxee, Apple TV) respond to the growing consumer demand for more flexibility and lower prices. In this context, competitive OTT pressure and growing anxiety about cord-cutting – whereby especially younger people tend to drop cable subscriptions and connect with the Internet for watching TV programs and shows – has led the cable industry to launch innovative multi-screen offerings to appeal to the on-demand-everywhere demands of next-generation viewers. Although the strategic responses from multichannel operators are similar over the world, this article contends that the impact of cord-cutting differs among countries, and crucially depends on the level of network infrastructure, subscription tariffs and the attractiveness of the available OTT platforms. By presenting the results of a large-scale user study on OTT services, we show that the local context needs to be taken into consideration while assessing the impact of OTT services on cable operators. The case study is limited to Flanders, the northern part of Belgium, a cable-dominant region where over 95% of the television households has access to cable infrastructure. In addition to this specific market configuration, user expectations play a crucial role in the acceptance of OTT TV in the market.

Television distribution market in Flanders

Historical evolution

In order to satisfy consumers' large interest in foreign channels, Flanders became the first region in continental Europe to roll out cable distribution networks. As a result of a historically created 'convenience monopoly', the cable operators have sole access to the residential distribution market and were able to build a powerful position. Only recently, this monopoly was challenged by the introduction of new digital platforms. Nowadays, the

residential market contains five different distribution platforms delivering digital television services to end-customers: cable, terrestrial, satellite, mobile and the switched network (DE MAREZ *et al*., 2008).

However, while the digitization of the audiovisual landscape and the rise of OTT platforms are challenging the cable's monopoly, cable itself is in a process of digitization as well, using the European standard for digital broadcast transmission over cable (DVB-C). After swallowing up all local cable companies, Telenet – a Liberty Global property – expanded into a dominant cable television distributor. State-owned telecom incumbent Belgacom is its main challenger. While Telenet offers its digital services over the cable coax network (DOCSIS 3.0), Belgacom IPTV services operate over the switched network (VDSL). End of 2010, telecommunications regulator BIPT forced both providers to open up their network to other providers of digital television services.

In June 2006, competition between distributors tightened with the entrance of TV VLAANDEREN followed by Mobistar (a France Telecom subsidiary) in 2010 [1]. In 2013, telecom operator Base Company (a KPN subsidiary) announced 'Snow'. With 'only' 32 digital channels – compared with over 75 channels provided by Telenet and Belgacom – Snow explicitly targets the consumers that only want to pay for the channels they like to watch. Mid December 2012, the first local OTT-only operator, WeePeeTV, announced it would compete the established distributors with a low-cost and flexible channel package accessible on mobile devices & smart TVs (app), an internet based set-top box for the TV and online (browser).

Operators and offerings

Today, the market for television distribution is characterized by a de facto duopoly, with Telenet being a dominant player (holding a market share of over 80%) and Belgacom acting as the main challenger (see table 1). In this quickly changing market, cable distribution still has the upper hand, but it is clear that cable is increasingly being challenged. Cable still prevails in a traditional cable-dominant region as Flanders, but competitive and regulatory developments are putting pressure on the leading position of domestic cable operators. In 2007, cable operators have seen their subscriber numbers fall

[1] Due to limited consumer uptake, Mobistar decided to stop delivering digital satellite services from September 2013 onwards. A deal has been made with TV VLAANDEREN to provide the TV service.

for the first time since 1991. Due to intensified competition, Telenet reports an organic decline of around 75,000 subscribers each year. Moreover, the regulatory decision to open cable infrastructure for alternative operators could lead to a further erosion of the company's subscriber base. Although the market position of Belgacom is much stronger in the southern (and smaller) part of Belgium, the company is one of the fastest growing and most innovative IPTV platforms in the world (67% of Belgacom's new customers has dropped cable). The satellite initiatives deployed by TV VLAANDEREN and especially Mobistar have not been an overwhelming success in this cable-dominant area, and failed to challenge the existing duopoly. Given the fact that the Flemish cable viewer has been 'spoilt' by the high quality reception of over 70 channels, the limited supply of television channels prevents terrestrial platforms from attracting customers. Furthermore, price regulation for cable television (with €13.5 subscription prices for basic television among the cheapest in Europe) makes price competition an unsuccessful strategy. Therefore, operators are betting on product differentiation, with a focus on service and business model innovation.

Table 1 - Television distributors in Flanders (own estimations) (*)

Television distributor	*December 2006*	*December 2009*	*December 2012*
Telenet (analogue)	1,379,000	1,342,000	549,200
Telenet (digital)	226,000	1,001,000	1,573,500
Telenet total (cable)	1,604,000	2,343,000	2,122,700
Interkabel (analogue)	773,638	-	-
iN.Di (digital)	33,000	-	-
Interkabel total (cable) (**)	806,603	-	-
Belgacom TV (Flanders)	70,000	357,200	523,000
Base Company (IPTV)	-	-	15,000
TV VLAANDEREN (satellite)	30,000	80,000	110,000
Mobistar (satellite)	-	-	27,846
Terrestrial (analogue)	60,000	-	-
Terrestrial (digital)	12,000	24,000	26,000
Terrestrial total	72,000	24,000	26,000

(*) Many thanks to Eric Dejonghe for providing the data.

(**) In 2008, Telenet absorbed Interkabel for €427 million.

The fierce competition between Telenet and Belgacom for triple play customers has triggered a wave of innovation in television distribution technology (see table 2). In 2010, Telenet launched its 'Yelo' application, a mobile service that allows Telenet subscribers to freely watch more than 40

linear TV channels on their smartphone, tablet, computer and TV set (but only over a Telenet supported internet connection). In addition, Yelo provides mobile access to recorded programs from 20 channels. However, the channels from leading broadcasters VRT and VMMa (with a combined 70.2% market share) remain absent due to copyright discussions. Similarly, Belgacom launched 'TV Overal', providing access to over 30 linear channels (including VRT, VMMa and live football) over a Belgacom supported network for an additional monthly €4.95 fee. In 2013, the three major broadcasters VRT, VMMa and SBS – grouping 11 popular channels – started the 'Stievie' platform, a mobile app that allows paying customers to watch live and on-demand. With their own OTT initiative, the broadcasters provide an alternative to the operator-controlled services and secured their place in the mobile TV market. The first local, independent OTT operator WeePeeTV came into the market in 2012, and provides access to 5 basic and 10 flexible channels on all internet-connected devices (for €12 per month). Rumour has it that Netflix is targeting the Belgian market, but since domestic programming is key to a successful marketing strategy, Netflix first has to enter into agreement with local broadcasters that run a competing OTT service.

Table 2 - OTT TV services in Flanders

	Yelo	*TV Overal*	*Stievie*	*WeePee TV*
Control	Cable operator (DTV provider)	IPTV operator (DTV provider)	Broadcasters	Independent
Channels	43	34	11	15
Monthly price	Free (with regular TV subscription)	€4.95 (on top of regular TV subscription)	To be decided (currently in a free large scale test phase)	€12
Functionalities	Live, on-demand, EPG, recording	Live, on-demand, EPG, recording	Live, on-demand, EPG, social media	Live
Devices	Mobile/computer	Mobile/computer	Mobile/computer	Mobile / STB / computer / Smart TV app
Network	Telenet	Belgacom + FON	All networks	All networks

■ Current audience insights on OTT TV

Whereas the emergence of over-the-top television clearly has an impact on the television market, it is also a reflection of changing audience habits.

Therefore, an assessment of the OTT TV evolutions and cord-cutting should also consider the perspective of the audience and the context in which media products are being consumed. Households are increasingly connected to high-speed internet (ITU, 2012), allowing them access to a network that can deliver almost any type of media, wherever they want, whenever they want. FRIEDEN (2012) distinguishes three types of alternative sources of television content, enabled by the rise of the internet: (1) 'illegal, copyright infringement access' (peer-to-peer file sharing, torrents) (2) 'new, lawful access to live television or video files via new intermediaries' (Amazon, Apple, Hulu, Netflix) and finally (3) efforts by incumbent broadcasters, broadcast networks, direct broadcast satellite operators and cable television systems that offer new television everywhere services (Yelo, TV Overal). All three of these alternatives are challenging traditional formats of television distribution. With the emergence of ever more screens (tablets, desktop computers, multiple televisions, laptops, smartphones) in the house, the battle for the audience on these alternative platforms is at full speed. Whether OTT TV will be disruptive, a substitution or complement will also be determined by the way it is being domesticated within a social context.

JONES (2009) is one of the few authors that analyses the rise of alternative sources of television content from a social point of view. She describes three shifts in the social context of watching television: (1) a spatio-temporal disconnection, (2) a raised intentionality of watching television and (3) an interpersonal disconnection. The first evolution points out the fading connection between 'watching television' and 'the home' or 'the living room'. Nowadays it is possible to watch television content wherever and whenever you want. This is a big difference with the original television, which was a single central device in the living room that had a monopoly on television content. The increased intentionality of watching television is enabled by new technologies and services which make it far easier to record or request the content you want to see at any given moment. Therefore, the audience is slowly turning away from the linear signal towards pre-programmed recordings and 'à la carte' services. A third shift Jones discerns is the interpersonal disconnection, the changing micro-social dynamics (e.g. within a family) as a result of the fact that television is no longer being consumed at the same moment and time, splitting up and fragmenting television audiences. This conflicts with a traditional uniform television offer and calls for tailored solutions. Others authors, such as CUSUMANO & SUMMA (2011), disagree with this statement and proclaim that television is becoming increasingly social because of its connectedness to the global information and communication network. According to these

authors, the changing micro-social dynamics do not necessarily imply that viewing behaviour is becoming less social because this allows e.g. sharing viewing suggestions, discussing the content, 'social watching' (watching the same content at the same time with others on another location), friend recommendations, etc. They state that, when you look at it this way, television is more social than it has ever been.

In her article 'Television on the internet: new practices, new viewers', BARKHUUS (2009), points out that watching television by youngsters is increasingly disconnected from the television as the main medium to watch television content. Instead, the computer has become an important source of television content. On top of that, young audiences tend to highly personalize their media consumption on this device and value this as a very positive evolution. This personalization has led to a massive fragmentation of the once so unified television audience. When it comes to the technology itself, consumers of television content seem to have a higher tolerance for lower quality video compared to attempts to restrict access to the content. If the process of getting legal access to the content is too complicated, they will skip to illegal alternatives without hesitation (THIERER, 2009). Furthermore, audiences do not seem to care that much about the medium, as long as they can see what they want, when they want (FRIEDEN, 2011).

So both audience behaviour and television offering have changed over the past years. This puts traditional broadcast and distribution models under pressure and causes every stakeholder in the value network to search for new ways to increase or maintain their market share. Does this mean that traditional television is steadily being replaced by alternatives? Most studies show that OTT TV is mainly being domesticated as a complementary rather than as a substitutional source of television content. BANERJEE *et al*. (2012), for example, argue that the consumption of television content is a multi-facetted complex experience and that each medium is linked to specific genres. They also show that OTT TV is becoming a major industry, but that this evolution only has a limited effect on traditional cable subscriptions. Nevertheless, in the US market, according to SNL Kagan, OTT 'substitution homes' grew from 3.2 million (end of 2011) to 4.2 million (end of 2012) [2]. When it comes to the television consumption behaviour of young households, studies in the US show that there is a growing group of households, called 'zero-TV households', which is not just cutting the cord,

[2] Source: http://www.rapidtvnews.com/index.php/us-pay-tv-gains-slow-to-a-trickle-but-is-cord-cutting-to-blame.html

but completely turning away from the TV set, for Pay-TV, broadcast as well as for OTT TV (currently estimated at 5% of the households) [3].

Whereas the above presents interesting insights on current evolutions in a changing market and changing consumption patterns, most of the research is based on the television market in the US. As we argued, these evolutions are market dependent. Whereas the US market is much more fragmented and allows for easier mobility between different offerings, the Flemish market is rather inert. The dominant position of Telenet and the high adoption of triple play offers have highly increased switching costs for most television households. On top of that, the fierce competition between Telenet and Belgacom has resulted in low prices, offering very little incentive to change, and in a highly competitive environment in which both companies try to gain market share with continuous innovation. Therefore, the remainder of this paper will assess the evolution of OTT TV in this specific context.

■ Methodology

Table 3 - Sample description (selection of parameters)

		Single, no children	*Single, with children*	*With partner, no children*	*With partner & children*	*Living with parents*	*Living with others*	*Widow*
Living situation	Sample	14%	4%	25%	37%	18%	2%	0%
	NIS	14%	7%	26%	32%	16%	1%	5%
	Δ	0%	3%	1%	5%	2%	1%	5%
		1	**2**	**3**	**4**	**5**	**6**	**>6**
# people living together	Sample	15%	30%	19%	26%	9%	1%	0%
	NIS	19%	33%	15%	21%	9%	2%	1%
	Δ	4%	3%	4%	5%	0%	1%	1%
		10-20	**21-30**	**31-40**	**41-50**	**51-60**	**61-70**	**>70**
Age	Sample	1%	29%	37%	23%	6%	3%	1%
	NIS	13%	14%	15%	17%	15%	12%	14%
	Δ	11%	15%	22%	6%	9%	9%	14%

This research is conducted in the Living Lab called LeYLab [4], during a project to develop future over-the-top television services. For this research,

[3] Source: http://www.rapidtvnews.com/index.php/2013031226748/zero-tv-households-total-5-in-the-us.html

1,269 respondents responded to the open call by means of an online survey which was active between December 4th and December 19th 2012. The respondents were recruited through targeted mailing and social media. The open call to participate mentioned the topic of this research. To assure that the panel was representative for the Flemish population, the socio-demographic variables of the survey were compared with the data of the NIS (National Institute for Statistics). The socio-demographic data are within acceptable range of the data of the NIS, with the exception of the age categories. More specifically, people between 20 and 50 years old are overrepresented. Therefore the results of this survey will be weighted by age in order to correct this bias.

Results

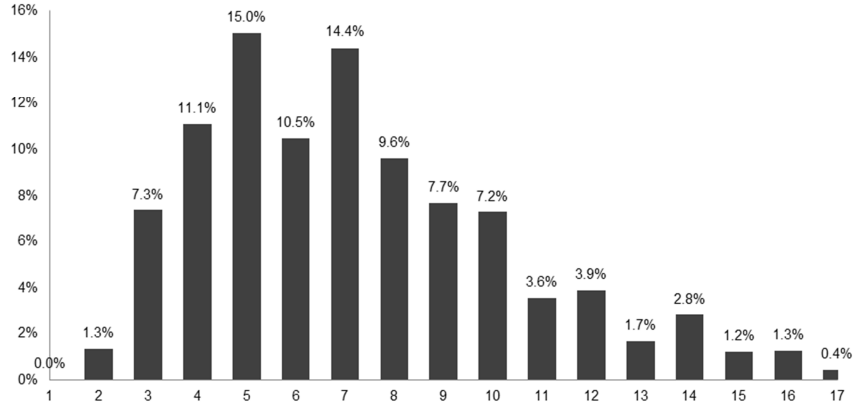
Multi-screen households

While the increasing amount of multimedia screens in the households took off with the introduction of computers, houses are now packed with a wide variety of screens. The results show that 57.2% of the households have between five and nine multimedia screens (television, tablets, computers and smartphones) at home (figure 1). On top of that, these screens have broadened their scope of application over the past decade, now allowing a wide variety of uses. Technically it is possible to watch television content on all of these screens, but what matters is the extent to which these functionalities are actually being used. In other words, while the technology adoption is rather high, it is important understand the use diffusion as well. The primary screen to watch television content is still the television itself. 61.3% of the television owners use the TV on a daily base to watch television content. Smartphones are the least popular technology to watch television content. Only 14.8% of smartphone owners use this technology for the consumption of television content on a daily base. Besides television screens, computers (33.4% daily) and tablets (24.5% daily) are the most popular alternatives. The low use diffusion of television consumption on smartphones contradicts FRIEDEN's (2011) statement that audiences do not care about the medium. Furthermore, these data show that the television screen is still important, but clearly lost its monopoly on the consumption of

4 LeYLab.be/English

television content. Strong correlations exist between the frequency of computer use for television consumption and the frequency of tablet use for television consumption (r=0.48; p=0.00) which points at the existence of a distinct usage pattern. The relation between devices and consulted sources of television content show a positive correlation between the frequency of watching television content on a computer and the frequency of watching legal streaming content (r=0.33; p=0.00). Overall, the total amount of consulted sources of television content correlates positively with the frequency of watching television content on a computer (r=0.32; p=0.00), on a tablet (r=0.39; p=0.00) and on a smartphone (r=0.33; p=0.00). While BARKUUS (2009) stated that this specific usage pattern appears most often with youngsters, the data show no evidence of this. Nevertheless, both the adoption and use diffusion have indeed reached a level at which the consumption of television content is no longer connected to the television screen alone. This causes a problem because television broadcasters and distributors in the Flemish market are used to deliver a single signal to a single subscription, which provides a single television signal to a single screen. This is not in line with the aforementioned usage patterns and needs. In an open text field, respondents were asked what their biggest frustrations with the current television offerings were. One of the main frustrations appeared to be the fact that there was only one device that could be connected to the broadcast signal. Whereas multiple screens are being used for the consumption of television content, current broadcast and distribution organisations are still struggling with providing all of these devices with their content (explaining the emerging OTT TV initiatives). This causes audiences to search for alternatives, which will be discussed in the next section.

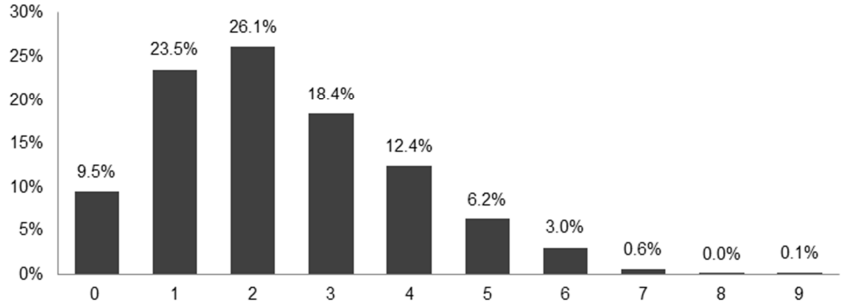
Figure 1 - Amount of screens (TVs, smartphones, tablets and computers) in a Flemish household (n=1,269)



Multi-source media consumption

Due to the historical context, set-top boxes and cable subscriptions are common in Belgium. The data show that 82.1% of the total population has digital TV (DTV) by cable or telephone line. The main reasons for not having DTV are the price (32.8%), the closed nature of the ecosystem (10.4%), unattractive/obsolete content (9.0%) and the restricted access outside the Flemish territory (7.5%). 17.6% of the non-adopters are "defector," which once had a DTV subscription but dropped out. The data also indicate a relationship between non-adoption of DTV and an overall lower presence of multimedia technology and a lower frequency of television content consumption. Non-adopters possess less multimedia screens ($t=6.99$; $p=0.00$), consume less television content ($t=5.05$; $p=0.00$) and use less alternative sources of television content ($t=6.11$; $p=0.00$). Although penetration of DTV in Flanders is high, alternative sources of television content are frequently being consumed as well. Only 9.5% never consumes any alternative source of television content. Figure 2 gives an overview of the amount of alternative sources of television being consumed. Table 4 elaborates on the different alternative sources that are being consulted and the percentage of users that uses these sources on a daily base.

Figure 2 - Amount of alternative sources consumed (n=1,269)



In the search for (alternative) television content on alternative screens, a wide array of sources is being consulted. The most common source is 'legal streaming websites', such as YouTube and the website of the public broadcaster (which makes most of its items available on an online platform). While this category occurs most, both in terms of adoption diffusion (72.7%) and use diffusion (47.8% daily), it must be noted that this is often 'lean forward' media consumption, while the traditional television consumption has a 'lean back' nature. In the light of cord-cutting practices, this kind of media consumption should most likely be regarded as a complementary source, which has a different meaning and usage pattern (which will be discussed below). The OTT TV initiatives of the two main television distributors (Yelo and TV Overal) have found their way to the users as well, but Yelo scores significantly lower in terms of use diffusion (16.3% daily).

Table 4 - Alternative sources of television content and the percentage of the population that consults this source (n=1,269)

Alternative source of television content	*Percentage of population*	*% daily*
Legal streaming websites	72.7%	47.8% (n:922)
Yelo (OTT TV initiative of Telenet)	34.2%	16.3% (n:434)
Illegal downloads	26.6%	17.8% (n:337)
Apple TV/ Roku/ BeeBox/ TiVo	22.6%	40.0% (n:287)
Legal downloads	22,0%	6.6% (n:279)
Illegal streaming websites	15.9%	6.8% (n:202)
Apps on a SmartTV	13.4%	20.1% (n:170)
TV Overal (OTT TV initiative Belgacom)	7.6%	37.9% (n:127)
Other	7.5%	66.7% (n:95)

Besides the legal sources, 31.9% of the population consumes illegally obtained media (illegal streams or illegal downloads). When respondents

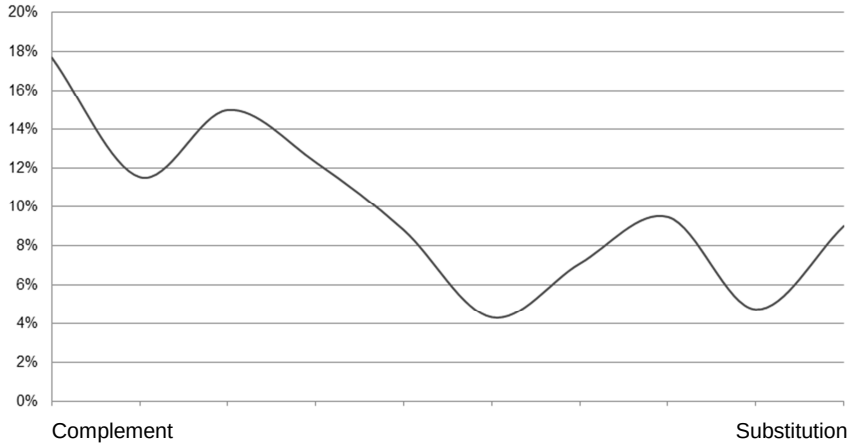
were being asked for the drivers of this illegal behaviour (open field) the main motivations included the unavailability of the requested content through legal sources (too late, or not at all), the price, the ease of use (no hassle) and the flexibility (anything, anywhere, anytime, on any device). This confirms THIERER's (2009) findings that restricted access will quickly cause audiences to look for illegal ways of access and that audiences consume 'what they want, when they want' (FRIEDEN, 2011).

In the light of OTT TV, these observations should be taken into account when developing future television services. However, the availability of existing alternatives causes user expectations to be high. In order to be able to compete with these sources, the strength of each of these sources should be integrated as much as possible. An important dimension in this discussion is the extent to which alternative sources of television consumption (including OTT TV) are being regarded as complimentary or as substitutional. The first scenario has a limited impact on classic television distribution whereas the second scenario implies a more disruptive evolution, often referred to as 'cutting the cord'.

Substitution versus complement

Overall, alternative sources of television content tend to be rather of a complementary rather than of a supplemental nature, thus not forming a threat for the traditional distribution and broadcast model. However, there seem to be two main clusters of media consumers (figure 3). Respondents between 20 and 30 years old score significantly higher on substitutional perception of these alternatives ($F=31.5$; $df=1,147$; $p=0.00$). This suggests a distinct perception rather than usage pattern for youngsters. This is interesting as this is the generation which is moving away from the parental home towards an independent life, being the main new adopters of DTV services.

Figure 3 - Alternative sources: a substitution or a complement of the traditional television offer? (n=1,269, measured on a 10 point bipolar scale)



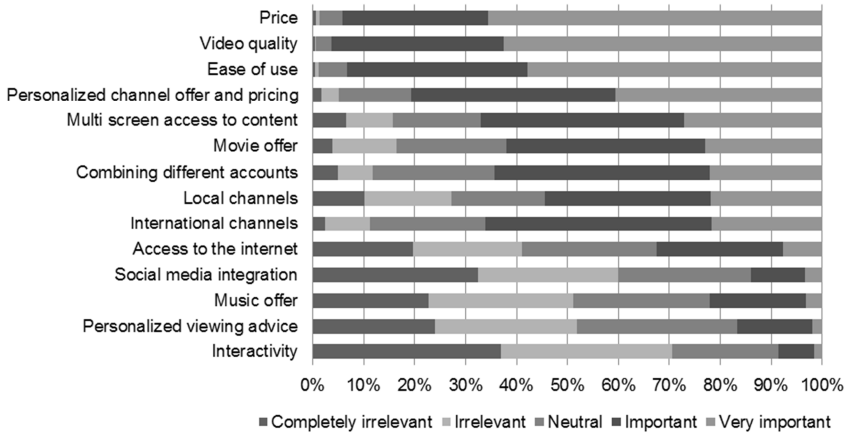
Because the alternative sources of television that were part of this research are quite diverse, it is interesting to elaborate on the differences between users of the different media sources, especially when it comes to the complementary versus substitutional nature. Users of both legal (t=1.18; p=0.24) and illegal downloads (t=0.90; p=0.37) perceive the alternative sources of television content as more substitutional. This difference is even more present for users of media centres such as AppleTV, BeeBox, Roku or TiVo (t=-5.99; p=0.00). These results indicate the existence of a 'tech-savvy' user segment that wants to have control on both the device and content they want to watch. It also confirms the hypothesis that lean back television consumption alternatives pose a greater threat for traditional television than lean forward media. Furthermore, in order for 'OTT TV only' services to be successful, the offer should be both substitutional (including both the content and the services that are currently part of the traditional DTV offer) and it must add additional complementary value, preferably at a lower cost, in order to provide sufficient added value to convince television consumers to cut the cord. This complementary offer can exist of several services and dimensions. Therefore, the next section elaborates on the different dimensions of an OTT television offer.

Defining the main factors for OTT TV success

As discussed before, the fierce competition between Telenet and Belgacom for the dominance over the Flemish television market has caused

both organizations to innovate at a fast pace. As a result, the current Flemish DTV offer is relatively cheap, has a wide array of services (e.g. easy recording, pausing, forwarding, etc.) and contains a lot of television and music channels. When this offer is not enough, both distributors offer additional content through prime channels and video-on-demand (which also includes a movie library). This context is important because media consumers have come to perceive this offer as the standard and do not accept anything less. Figure 4 shows the importance of different factors of OTT TV success, based on the question "How important are these dimensions for you when it comes to television over the internet in the future?"

Figure 4 - Defining the main factors of OTT TV success (5-point likert, 1: completely irrelevant, 5: very important)



Whereas current DTV/OTT TV prices in Flanders are rather low, the monthly cost is still the main ingredient for success. New initiatives will be primarily judged on their pricing. However, current DTV pricings in Flanders are most often part of triple play bundles which include an internet and telephone service. This raises two barriers for new market entrants. First, these triple play bundles are being composed in such a way that if one of the three elements is being removed, it hardly makes any difference in the total pricing. This makes switching between different distributors much harder and does not allow for a flexible composition of telecom services.

Second, OTT TV is still dependent on an internet connection, which means end-users have to pay a double cost if they opt for an independent OTT TV organization. Therefore, OTT TV distributors which do not offer a

triple play bundle themselves will have difficulties to compete against the two dominant players on the market. Because both Belgacom and Telenet (1) included OTT TV services in their own service offer lately, (2) offer DTV themselves, (3) pricing is the main determinant for success and (4) triple play bundles tightly bind consumers to one distributor, a large scale cord-cutting scenario in Flanders is unlikely. A more plausible scenario is a battle for the secondary screens in the households. This is in line with the work of BANEJEE, *et al* (2012), who argue that OTT TV only has a limited effect on cable subscriptions.

A second challenge is the importance of the video quality. Although THIERER (2009) argues that there is a higher tolerance for low video quality compared to the restriction of access, video quality nevertheless appears to be a crucial factor for OTT TV success. The market is getting used to high definition video and expects nothing less when it comes to OTT TV. However, current network technology only has a limited bandwidth, especially for mobile connections and the simultaneous use of a shared internet connection in a single household. Moreover, high quality video consumes a lot of data traffic, which again raises the cost for the users. The importance of the dimension 'ease of use' is in line with a broader trend towards sense and simplicity in graphical user interfaces and an increasing user aversion for complicated environments.

Whereas the three most important dimensions focus on the elementary factors of television distribution and will be hard for new market entrants to compete with, the fourth and fifth most important determinants create opportunities. While the existing DTV offer has a fixed nature, with a unified offer at a single price, end-users call for increased flexibility. This flexibility can exist at different levels. With 75 video channels and 36 radio channels, some people still complain about the absence of their niche channel. Others, however, complain about a channel overload. An opportunity might lie in an 'à la carte' model that fully benefits of the possible long tail of OTT TV. Such user-selected channel offer could be combined with flexible pricings and different user accounts (seventh dimension [What does this mean?]), thus serving every single family member at every possible screen in the house. Finally, besides technological and service dimensions, content cannot be neglected.

When it comes to whether or not OTT TV will be fundamentally social, our results show that social media, personalized viewing advice and interactivity are among the least important factors for OTT TV success. This puts the findings of CUSUMANO & SUMMA (2011) into perspective, since

the struggle for (new) audiences will not be determined by these innovative functionalities. OTT TV initiatives do not need to focus on (disruptive) social features, but need to perform well on more traditional dimensions in order to be successful.

Conclusion and discussion

Whereas there is potential for over-the-top television to grow, a large scale cord-cutting scenario in a cable dominant market such as Flanders is unlikely to happen. Due to the high adoption of DTV and the fierce competition between the two dominant players in the market, the service innovation is high and prices are kept low. As a result, end-users are highly demanding. They expect a premium quality signal with advanced features at a very low price, anywhere, anytime, on every screen. On top of that, triple play bundles chain consumers to a single distributor, making it hard to cut the cord, since this would mean cutting both the television, internet and telephone line (often including e-mail addresses and mobile services as well). As (low) price is the main factor for OTT TV success, it should also be considered that a (high quality) television signal over the internet also includes the cost, and limitations, of a (high-speed) internet connection. In the Flemish market, OTT TV initiatives are currently being initiated by the main DTV distributors, the television channels themselves and by a new company, WeePeeTV, which has its roots in the telecom sector. All OTT TV initiatives try to adapt to the changing needs of the consumers in order to gain market share. The television screen has clearly lost its monopoly on the consumption of television content. Households nowadays are packed with screens, of which many are used to consume television content. Since this poses a threat for traditional television distributors, these organizations anticipated by developing OTT TV services themselves and by integrating them in their triple play bundles (for free or at a fairly low price). While OTT TV creates opportunities for newcomers to enter the television market, the strategy of the traditional television distributors raises the barriers for end-users to switch to alternatives.

This implies that the most likely scenario in Flanders is the evolution of OTT TV as a complementary rather than as a substitutional service. For new OTT TV market entrants to be successful in such a scenario different conditions must be met and added value must be created and proven. Not only should the OTT service have the same functionalities as the current

DTV offer (programmed recording, EPG and pausing), in the same quality, with the same content at a comparable (preferable lower) price, it must also offer something more. This added value can be twofold. First, there is a call for more flexibility and openness. In line with the mass customization paradigm GILMORE & PINE, (1997) showed that a unified product for the total market no longer meets the needs of the individual. Instead, there is a need for an increased personalisation with flexible pricings and optimal exploitation of the long tail. This flexibility need is also present regarding the screen and the place of television consumption. Second, these results show the different ways end-users search for additional content which is not available through traditional broadcasting. Especially in the case of illegal alternatives, added value might be created if this kind of content could be integrated in the OTT TV offer. Finally, four distinct target groups seem to be most interesting for OTT TV: (1) students, making the transition to a television subscription for themselves - but with a rather low willingness to pay, (2) expats who want to consume the television content of their home region, (3) 'content seekers' searching for unavailable content and (4) 'tech-savvy' consumers which have an aversion to the closed ecosystem of traditional television broadcasters (including the OTT TV initiatives of traditional broadcasters, which are only available on their own networks).

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