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Case study on the hybrid business model: KT's OTS

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Case Study on the hybrid business model: KT's OTS

Abstracts

This paper aims to analyze hybrid consumer behavior and develop a hybrid business model, which serves as a guideline to better understanding hybrid consumer behavior and their needs. The case is the telecommunication operator's new hybrid set-top-box business model which combines IPTV with DTH satellite reception and business.

This paper shows KT's OTS (Olleh TV Skylife) which has a successful market performance so far with the hybrid Set Top Box (STB). Before this regional study, it shows the current status of Korean pay TV market in overview. After this, it analyzes the service offerings of cable TV, satellite TV and IPTV. Then, it shows that the mixed service portfolio of satellite TV and IPTV is the perfect service combination to beat the cable TV in terms of hybrid consumer needs.

This paper also verifies that this hybrid business model generates good market performance and operating synergy with KT's other legacy businesses. In conclusion, this paper expects KT's vision about the future growth potential of OTS in home shopping, advertising sales based on the total subscriber base, and also KT's plan to make TV much smarter with innovative open business models such as TV application store of parent KT.

Keywords: Hybrid business model, IPTV, Satellite TV

1. Introduction

In the context of TV-Internet Convergence, TV operators are trying to seek some innovative way because the Internet technology would impact the way it does TV business. However, the revolution of the Internet has not yet turned out to be anything people once thought it would be. Recently, connection between social network and TV channel programming is gradually popular. But some consumers such as heavy TV audiences still prefer to engage in traditional passive use.

This paper focuses on introducing a successful midterm way in TV business model and aims to analyze a hybrid business model based on the slowly changing consumer behavior. The case is a hybrid business model which combines IPTV with DTH (Direct to home) satellite reception and businesses. Among several cases¹, this paper will deal with KT (Korea telecom)'s OTS (Olleh TV Skylife) case which has a successful market performance so far with the hybrid STB.

This paper firstly will show the current status of Korean pay TV market. After this, it will analyze the service offerings of cable TV, satellite TV and IPTV and will show how effective the mixed service portfolio of satellite TV and IPTV is to beat the cable TV in terms of meeting current consumer needs. It will verify that this hybrid business model generates good market performance and operating synergy with KT's legacy businesses and vision KT's future innovative business potentials.

2. Current status of Korean pay TV market

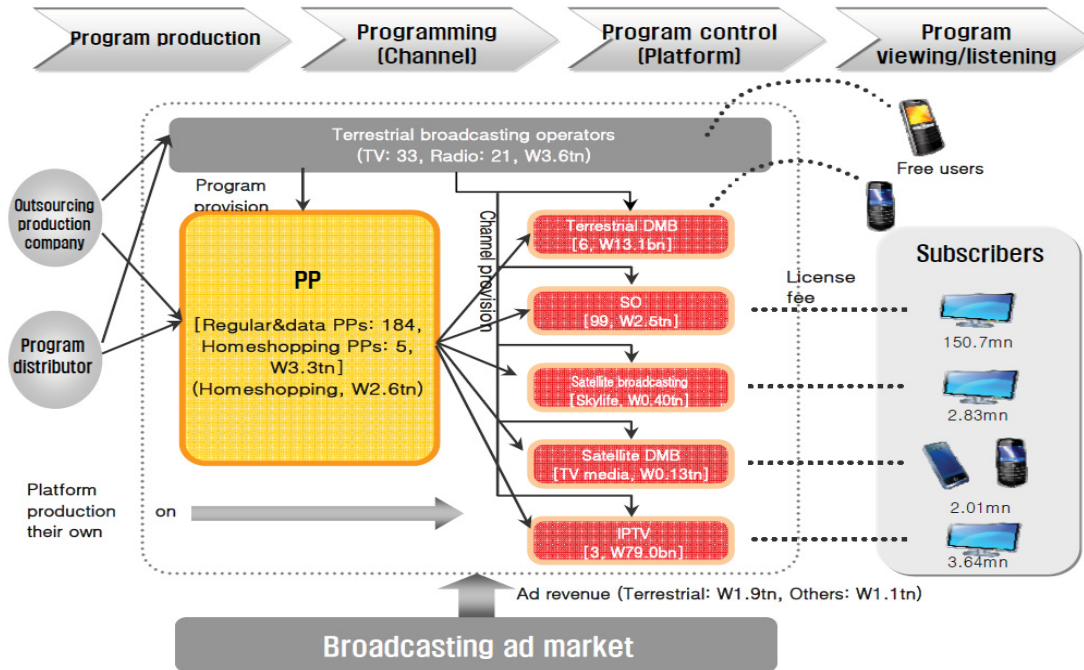
The walled-garden cable TV has still dominant position in Korean pay TV market thanks to the low price tariff. The number of cable subscribers reached 15.36 million in September 2009, but decreases to about 14 million in 2011. In contrast, there were 2.4 million IPTV subscribers in 2009 and the number is expected to swell to about 4.9 million in 2011. As for satellite broadcast, subscribers grew from 1.05 million in 2003 and are set to increase to about 3.5 million in 2011. According to the Korea Communications Commission, Korean pay TV market is expected to grow up to total revenue of US\$ 3.1 billion, and 21.43 million subscribers by 2012, thanks to the "digitization" progresses².

¹ In 2007, the company stepped up efforts to attract subscribers by bundling services with AT&T's broadband Internet and VoD. The switch to digital in the US offered the satellite broadcaster a golden opportunity to widen its customer base. As the growth worked to lower subscriber acquisition costs-to-sales, profitability improved. The share price has risen nearly three-fold since 2005. In contrast, shares of Dish Network, the runner-up in the US, have not recovered to the 2007 level due to weak net subscriber additions.

² Terrestrial analog broadcasting will be terminated from the end of 2012, but as of 1Q 2011 only 23% of all cable TV subscribers have switched to digital TV.

Major players in Korean TV market are free broadcasting operators and pay TV including cable TV, satellite TV, and IPTV. Major pay TV players are SOs, IPTV operators (KT, SK Broadband, LGU+), Skylife, the only satellite TV player launching in Mar 2002 and terrestrial broadcasting companies (free broadcasting operators).

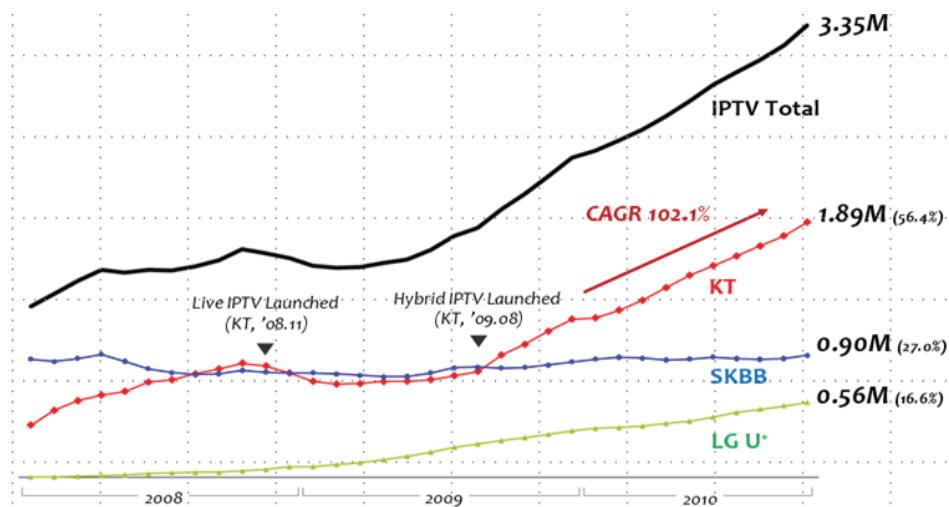
<Figure 1> Broadcasting process and market structure



Source: KCC, Hanwha Securities Research, June 2011; Subscribers as of FY10 (Satellite DMB as of end-FY09), Sales as of FY09

IPTV shows the fastest record of growing platform in Pay TV services as of 2010. While satellite and cable TV needed each 21 and 53 months to reach 1 million subscribers, IPTV needed only 9 months to reach same number of subscribers. This penetration is due to aggressive marketing and TPS (Triple Play Service) offering.

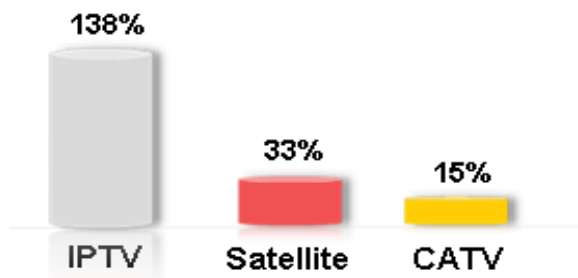
<Figure 2> Remarkable Korean IPTV market growth from 2008 to 2010



Source: Company data, 2010

Despite of this success, Korean IPTV market is still struggling with some limitations. Firstly, the content expense burden causes low profitability of IPTV. In order to offer more differentiated services, IPTV has to keep purchasing VODs and top-ranking channels with high content acquisition cost. However, most of the top-rank channels are vertically integrated in one entity, such as the terrestrial broadcasters with pay TV channels and CJ media group with cable system and channels. They seem to foreclose their channels or request huge money from IPTV operators.

<Figure 3> Ratio of content expense to gross sales



Source: inews24, Aug. 24, 2010

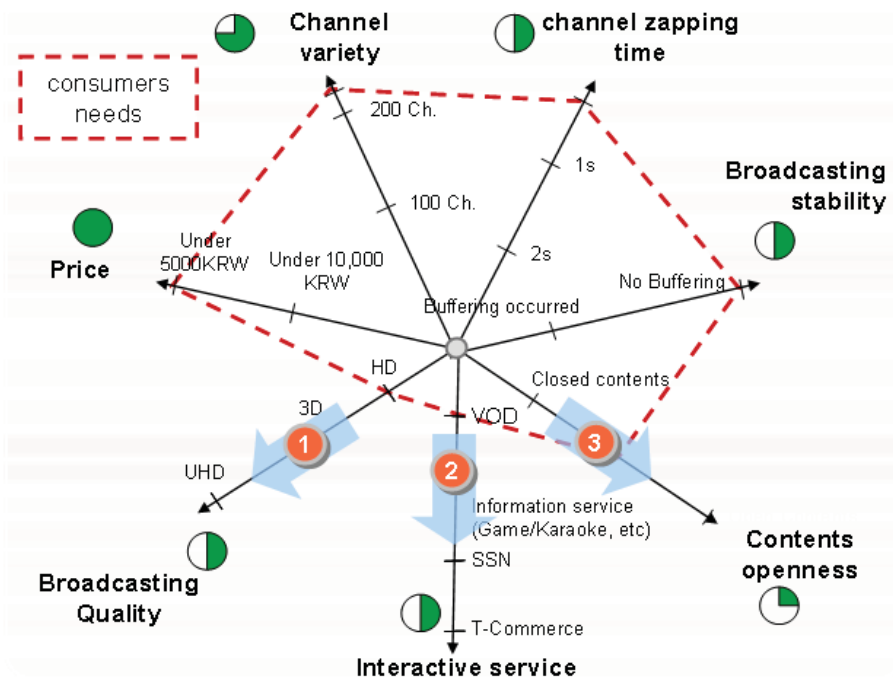
Secondly, the market saturation tends to lead fierce competition in pay TV service. Since IPTV is a new comer in pay TV service market, there is a little room for telecommunications operators. It shows 95% penetration in pay TV market and cutthroat competition among pay TV platforms. Moreover, they are confronting from cord-cutting of new competitors from web & devices, etc.

3. Background and business concept of KT's hybrid service, OTS

Before introducing the new business model, OTS, a brief explanation about key factors of pay TV service selection of consumers is helpful to understand why the hybrid service is needed on the consumer side. According to *Bain & company* (2009), channel variety and service price are top priority when current Korean people select pay TV service. *Bain & company* also expects that broadcasting quality, such as HD and 3D, and interactive service will be important pay TV service in near future.

At the moment, cable TV satisfies the current consumers' needs best so far. Cable TV serves more channels, in shorter zapping time than IPTV's. Cable TV serves very stable broadcasting service as well. On the other hand, IPTV has its own strengths in interactive service and price as well, and satellite TV has various live channels with HD. Since people usually focus on a lot of channels with cheap price, cable TV has 73.8% market share in current pay TV service. Seeking the solution to overcome these challenges, it has been thought about, "how about combining the strengths of Satellite and IPTV." That's the beginning of hybrid STB concept.

<Figure 4> Key factors for Pay-TV service selection



Source: Bain & company, KT project 2009

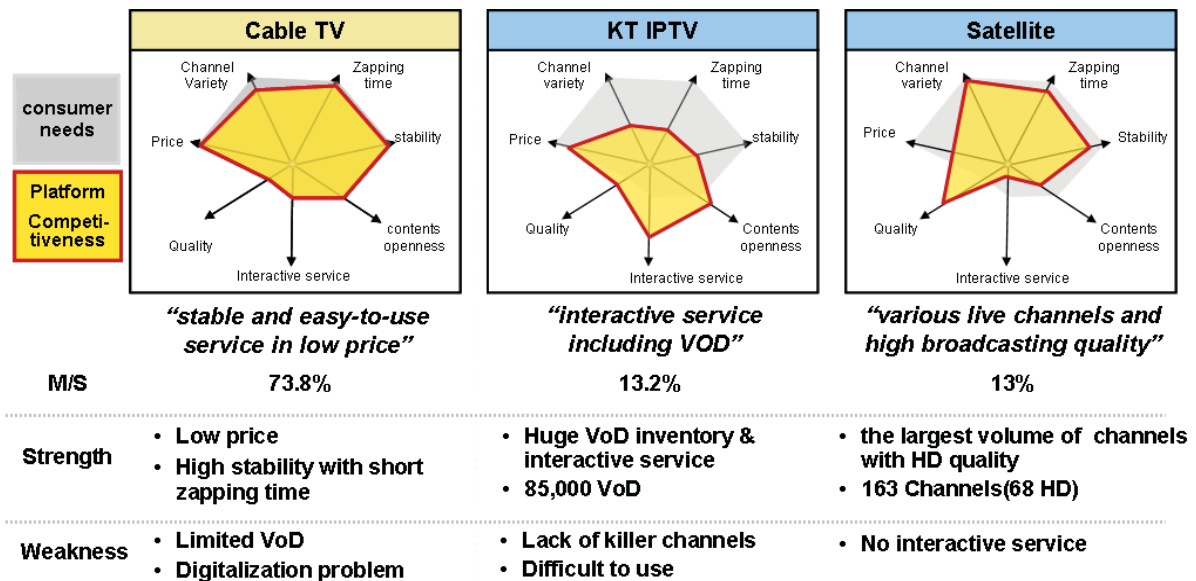
kt, as a dominant IPTV operator, had to break through the limitations with new rule for developing convergence businesses. In the middle of 2009, kt found a solution, so-called hybrid service, OTS based on strategic cooperation with satellite TV, kt Skylife(previous Skylife)³. In fact, most consumers are not interested in new IPTV until the hybrid business model was shown in the market.

The brand of this kt's new business model is sensational with the new service offerings and price setting. kt keeps trying to differentiate the current IPTV services with the philosophy, "cooperation & openness," harmonizing with the OTS and also embrace the future trend like the Broadband TV (Smart TV in Korea) in open ecosystem.

³ Skylife was selected as a satellite broadcaster in December 2000 after the launch of a consortium funded by KT, KTF (merged with KT on Jun 1, 2009), KBS, MBC, SBS (three major terrestrial broadcasters), Samsung Electronics, etc. It started the commercial service in 2002 as a sole satellite broadcaster in Korea and its monopoly status must be legally protected. Skylife claims a mere 3.3% of the pay TV market share measured by sales as of 2009. But its subscriber base widened to 2.83mn in 2010 and should continue to expand the share in the pay TV arena. Its major sources of revenue are subscription, advertising and channel offerings (incl. transmission commissions from home shopping channels). They respectively generated 69.1%, 3.6% and 11.1% of sales as of 2010. KT, the largest shareholder, expanded its ownership in Skylife from 26.6% to 32.1% in April 2010. Following its stake build-up, KT in December 2010 also acquired redeemable/convertible preferred stocks (5.6mn) and convertible bonds (5.6mn common stocks when converted) from Dutch Savings Holdings, the second-largest shareholder at that time. KT converted all the shares and CB it bought into common stocks on Mar 14. Skylife plans to issue 2.5mn new shares at the time of IPO and accordingly, KT's interest in Skylife would amount to 50.2%. Now, KT Skylife (previous Skylife) went public on June 3, 2011.

The concept of the hybrid service is quite simple. kt combines the advantages of telecommunication-oriented IPTV and broadcasting-oriented satellite TV. They together create differentiated services which cable TV can't deliver or imitate. As of the mid of 2009, Korean satellite TV has 163 channels, which is the largest volume in pay TV, but can't offer interactive services for its technical limitation. IPTV, on the other hand, has 85,000 VODs and the best platform to serve interactive service, but it is in trouble in channel supply. Hybrid service takes channels from satellite and takes VOD and interactivity service from IPTV.

<Figure 5> Competence analysis of Service Platforms as of mid of 2009



Since August 2009, kt Skylife and KT have been selling OTS that combines KT's fixed-mobile offering and IPTV with kt Skylife's broadcast service. By bundling services with kt, kt Skylife was able to secure kt's strong brand power and distribution channels, as well as two-way services such as VOD, which add to its arsenal for drawing subscribers.

For offering the OTS, kt developed new set-top box (STB) that can work to deliver through satellite and IP network at the same time. With this new STB, hybrid service subscribers can watch live channels delivered through satellite and enjoy interactive services and VOD with dedicated broadband network. (We call it premium network.)

By launching this hybrid service, kt can serve most of the consumers' needs, have various channels, some of them are HD, short zapping time, stable broadcasting service, and offer interactive service. While cable TV serves only for the present consumers with decent quality of channels in cheap price, hybrid service can serve not only for present consumers but also the future ones. Hybrid service can create

differentiated services, which cable TV can't deliver, just by combining the advantages of IPTV and satellite TV.

A bundled service of OTS, broadband and telephone costs KRW32,000~40,000 (3 years contract excluding surtax). It provides VOD and a range of channels for KRW35,000 per month (standard) in comparison to the lowest price of cable TV, C&M's KRW33,900 per month.

[Table1] Monthly usage fee (OTS alone) (Unit, W)

Classification		Service composition			Service usage fee		
		VOD	# of TV channels	# of HD channels	TV App Store	No-contract	olleh set home-based (3yr contract)
olleh TV SKylife	Premium	Around 90,000	169	77	○	30,000	20,000
	Standard	Around 90,000	134	54	○	25,000	15,000
	Economy	Around 90,000	99	31	○	20,000	12,000

Note: Surtax excluded, Source: Company data

[Table2] Monthly usage fee (Discount applied to a bundle service) (W)

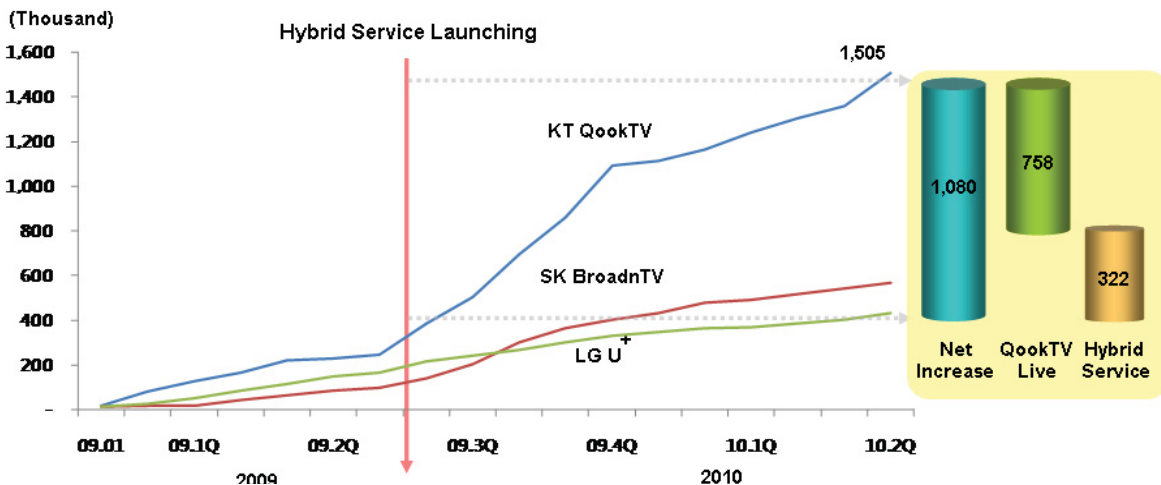
Product type	Fee for olleh TV+ Internet	Fee for olleh TV + Internet + telephony service
Premium	39,000	40,000
Standard	34,000	35,000
Economy	31,000	32,000

Note: Surtax excluded, Source: Company data

4. Performance of OTS & operating synergy with KT businesses

It's been two years since KT started hybrid service and there are some numbers to show the successful result. In August 2009, when KT started the hybrid service, Olleh TV (previous Qook TV) accounted for 45 percent market share in IPTV.

<Figure 6> Amazing growth story of KT's IPTV with new hybrid service "OTS" in Korea

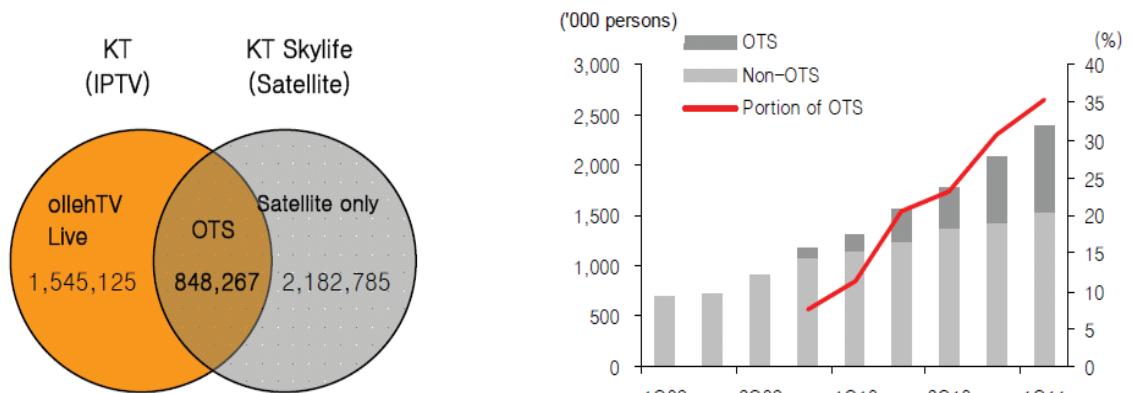


Source: KT, SKB, LGU+ IR reports

After launch of OTS, kt's market share in IPTV market skyrocketed to 60% in 9 months and one million new subscribers chose kt's IPTV. At second quarter of 2010, kt has had 1.5 million IPTV subscribers. 30% of new subscribers chose OTS. The number of kt IPTV subscribers has been continuously growing up after the OTS.

The market performance of OTS is now remarkable in terms of the number of subscribers. It has grown spectacularly since the end of 2009 and its number of subscribers skyrocketed 878 % from 87,000 to 848,000 at the end of first quarter of 2011. After two years, kt's OllehTV and Skylife are experiencing growth and profitability enhancement in full force, as its OTS subscribers are expanding.

<Figure 7> Number of subscribers to kt Skylife and subscription trend of kt IPTV

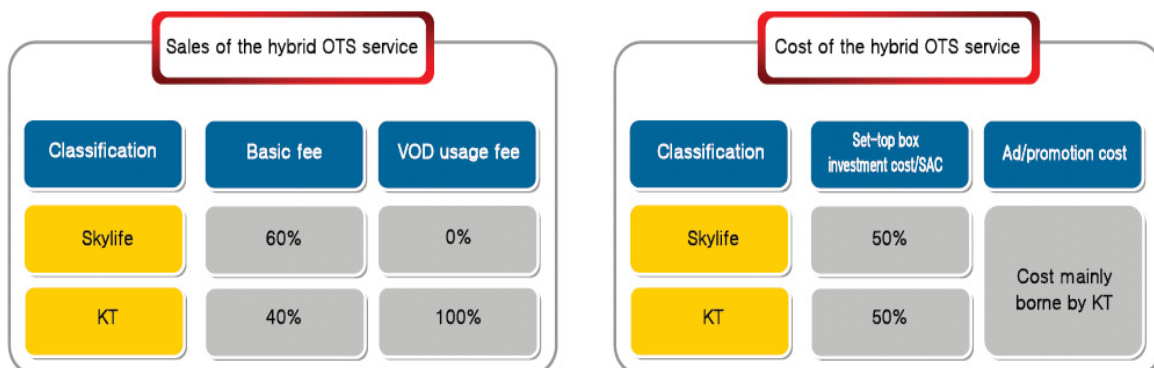


Note: As of end-1Q11, Source: company data, Hanwha Securities Research

Source: KT Skylife, Hanwha Securities Research

It is believed that this OTS has plenty of room to improve its margin, since joint marketing with parent kt should reduce per-subscriber acquisition costs. Although an OTS subscribers ARPU is less than kt Skylife's, this is sufficiently offset by subscriber growth. Moreover, kt shares SAC (Subscriber Acquisition Cost) and investment cost for STB, the company's cost burden has substantially fallen.

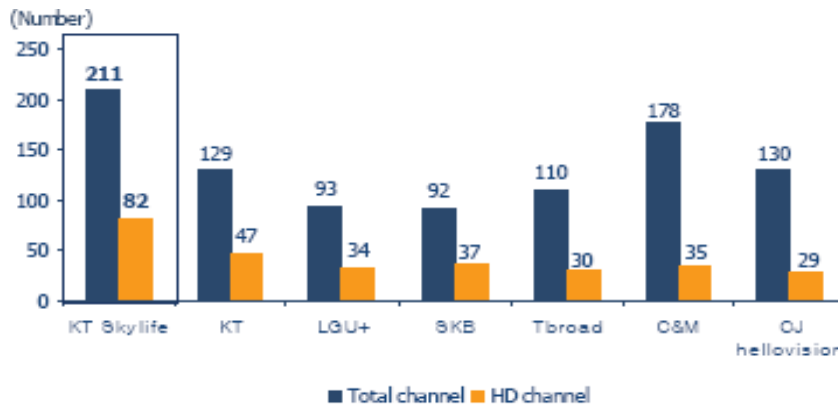
<Figure 8> Sales & cost recognition of hybrid OTS



Source: Hanwha Securities Research, June 2011

The launch of OTS substantially boosted kt & kt Skylife’s competitiveness in terms of product attractiveness and price. OTS is seen as highly competitive, in terms of content, offering the largest number of regular and HD channels through kt Skylife, as well as nearly 90,000 VODs from Olleh TV. Compared to other Korean IPTV and cable TV operators(See figure 9), kt Skylife offers a total of 211 channels, versus around 100 channels offered by peers. kt Skylife also offers 82 HD channels, more than double the number of HD channel offered by competitors. Meanwhile, VOD services are the strongest point of Olleh TV, with IPTV competitors offering only 30,000-50,000 VODs and cable TV operators offering far less VOD content, compared to Olleh TV. kt Skylife’s services offer cost benefits to subscribers as the company provides a larger number of channels at price levels similar to that of competitors.

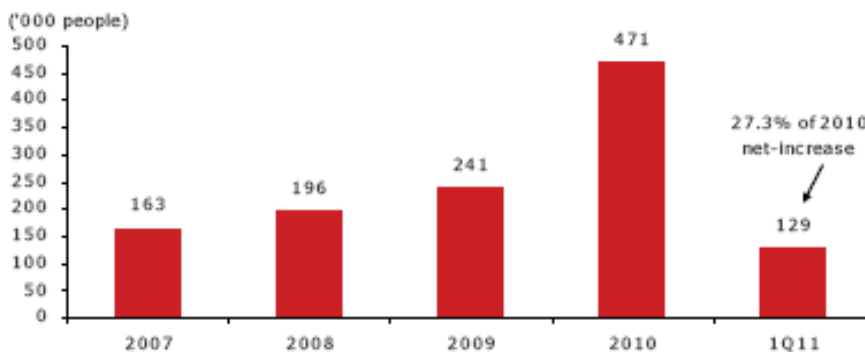
<Figure 9> The largest number of channels of kt Skylife



Source: Company data, 2011

Surging subscriptions to OTS have dramatically improved results at the fixed-line division by boosting broadband and fixed-line telephone subscribers. KT added 200,000 net broadband subscribers in 2008 and 240,000 in 2009. In 2010, net additions rose to as much as 470,000 and this trend is continuing into 2011, with net additions at 130,000 over January ~ March, 27.3% of the 2010 full-year net increase.

<Figure 10> KT’s net increase in broadband subscribers



Source: Tong Yang Securities, June 2011

The OTS has helped to lure broadband subscribers, demonstrated by the sharp rise in kt's share of broadband subscriber net additions since 2009. Sales of OTS, jointly offered with kt's OllehTV, seem to maximize synergy between the two companies, resulting in an increase in subscriptions and higher profit margins.

In addition to the TV business itself, it is expected that bundled products help secure subscriptions from existing kt broadband subscribers and the number of kt Broadband subscribers currently amounts to 7.55 million, with nearly 58% of these subscriptions bundled with Internet telephone services or IPTV. Bundle rates with IPTV subscriptions are about 32%. Overall, KT Broadband and IPTV subscribers should help to boost overall subscriptions for OTS.

In summary, kt overwhelms competitors in terms of price, quality, content, and bundling competitiveness and enjoys stronger price and content competitiveness than other telecommunications and outstrips cable TV SOs (See table 3).

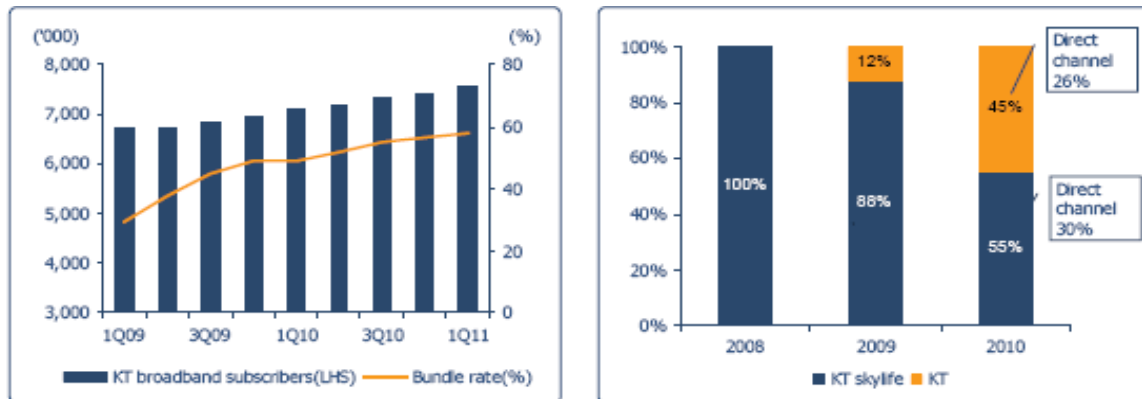
[Table 3] Competitiveness comparison

	KT OTS	SKB & LGU+	SO	Note
Price	1	3	2	
Content				
Real-time	1	3	2	HD channels : KT OTS 72, SKB 37, LGU+ 24, SOs 30~50
VOD	1	2	3	VOD: KT OTS 93,00, SKB 60,000 LGU+ 38,000, SO 23,000
Bundling	1	2	3	
Quality	1	2	3	

Source: Tong Yang Securities, June 2011; Note: 1 Superior, 2 Moderate, 3 Low

In addition, kt's distribution channels encompassing 1,460 branches across Korea, secure growth in new subscriptions. New subscriptions received through kt surged from 12% in 2009 to 55.3% in 2010. Direct channels play a larger role by securing subscribers, while at the same time improving profit margins by reducing SAC.

<Figure 11> Bundled subscription & subscription increase by kt direct distribution channels

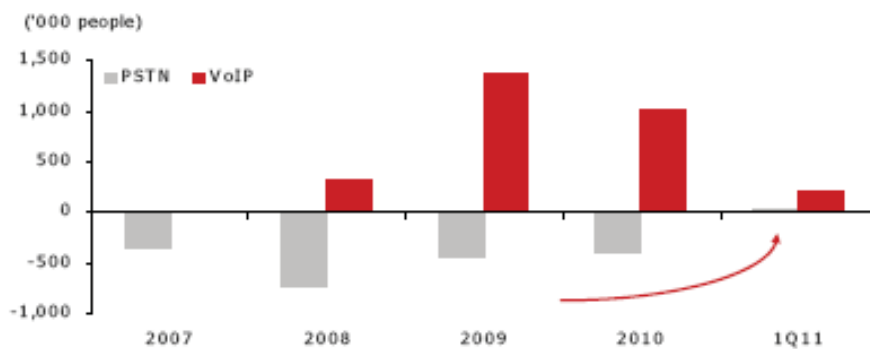


Source: kt, kt SkyLife, June 2011

Direct distribution channels accounted for 26% of kt Skylife and 30% of kt's total channels in 2010. It is expected that the company further expands efforts at securing more subscribers through direct distribution channels and partnership companies.

The OTS is also having a positive impact on the fixed-line telephone division. Although kt's fixed-line telephone (PSTN + VoIP) subscriptions have steadily dwindled, the decline has slowed. In particular, over February ~ March 2011, signups to fixed-line telephone service posted positive growth for two straight months, which we attribute to an increase in VoIP subscribers; and a slowed decline in PSTN subscribers, as a result of the bundled service reducing churn rate.

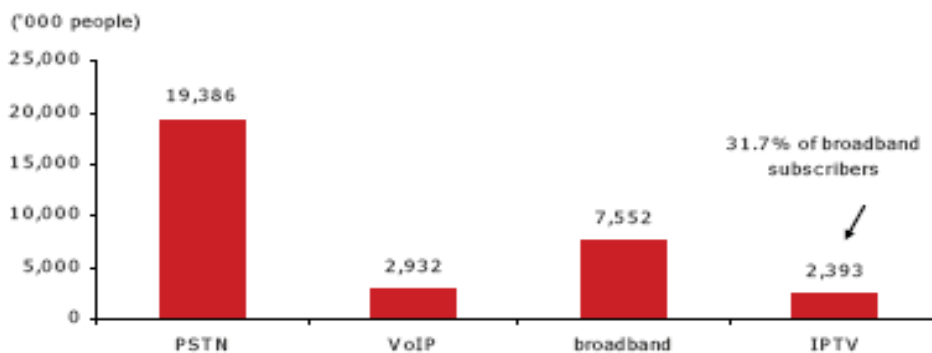
<Figure 12> kt's net increase in PSTN/VoIP subscribers



Source: Tong Yang Securities, June 2011

As broadband-only subscribers sign up for the bundled OTS, this could bring down the broadband churn rate. KT's ratio of IPTV subscribers to total broadband subscribers stood at 31% as of Mar 2011.

<Figure 13> KT's PSTN, VoIP, broadband, IPTV (incl. OTS) subscription (Mar. 2011)

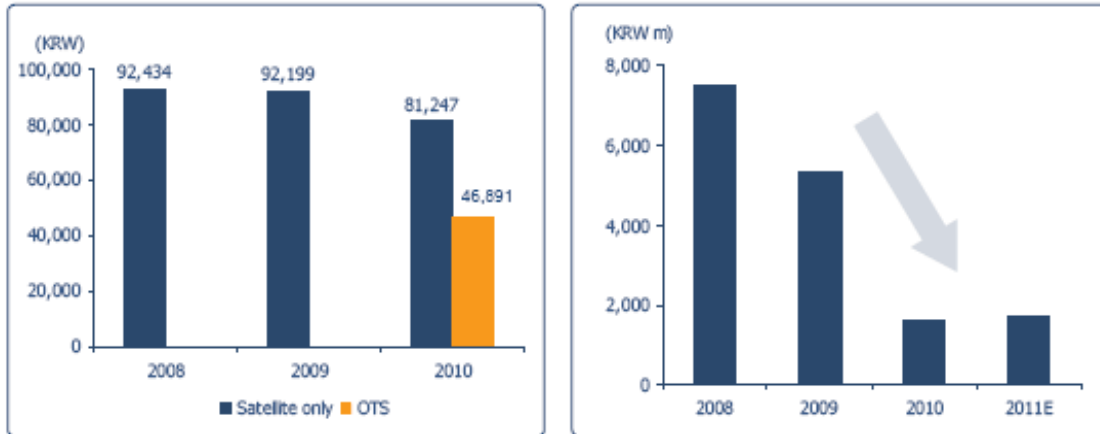


Source: Tong Yang Securities, June 2011

Meanwhile, it is expected to see visible improvement in profit margins along with growth in OTS subscribers. The ARPU of kt Skylife's satellite TV without any bundled services is at KRW10,000 versus the 10~20% lower ARPU of OTS, at KRW8,000~9,000 levels. However, OTS incurs 50% less SAC and advertising costs, helping to boost overall profit margins, despite its lower ARPU. For OTS, kt Skylife

and kt split expenses equally, regarding STB installation subsidies, subscription commissions and other marketing costs, significantly lowering SAC, as well as STB purchase costs (now accounted for as assets, after switching to a lease system).

<Figure 14> SAC of OTS/Satellite only & joint marketing lowering advertising costs



Source: KT & KT Skylife, June 2011

As a result, the SAC of OTS recorded far less than the SAC of non-bundled services, at KRW46,891. Co-marketing efforts with kt are also expected to lower advertising costs. Total advertising costs fell by 70% from 2009 to 2010, expect advertising costs to remain low (near 2010 levels) at the end of 2011.

5. Conclusion

This paper investigated KT's OTS having a successful market performance. kt has a big potential to be leading telecom and media player. Fixed-line fares are well on surging signups to OTS. With the launch of the OTS, kt doubled its net broadband subscriber additions. Since 2010, kt's share of net additions has reached close to 56%. Signups to fixed-line telephone service (PSTN + VoIP) posted positive growth for a second straight month from Feb. 2011, thanks to falling churn rate. Rising broadband and IPTV sales should offset shrinking fixed-line telephone service sales.

Thanks to the remarkable market performance and operating synergy with the new business model, OTS, kt and kt Skylife are well-positioned to become leading the pay TV market and broadband market as well. Thanks to the leading position in pay TV market, it is also expected that kt Skylife has large growth potential in home shopping⁴ and advertising sales⁵, backed by the steady increase in kt Skylife's total

⁴ Home shopping sales are expected to post rapid growth, quickly closing the gap with cable TV home shopping, as a result. kt Skylife's per-person home shopping broadcasting fees are significantly lower than that of cable TV (at KRW7,229 in 2010, versus above KRW30,000 levels for large MSOs with more than 2 million subscribers and the KRW27,000 market average). With kt Skylife's subscriber base rapidly increasing, it is expected to see the company quickly close the gap in home shopping with cable TV, going forward.

subscriber base. In order to be effective, home shopping and advertising require a certain level of subscribers. kt Skylife's total subscriber count jumped above 3million in first quarter of 2011 and is expected to increase to 3.5 million by the end of 2011 and providing a sufficient subscriber base for home shopping and advertising.

On the parent kt side, a big convergence strategy to be an enabler of an open media ecosystem could be accomplished based on the stabilized TV business backdrop with OTS. In front of drastic evolution into new media driven by global players like Apple, Google, and Netflix⁶, kt has already launched so-called "OPEN IPTV" in February last year. Unlike conventional IPTV which can be described as "Walled-Garden" business model, where kt takes total control over its resources and provides only selected content and applications, "OPEN IPTV" makes all the resources available to content and program providers. kt opens Application Programming Interface (API) to content and application developers and supports them with open Software Development Kit (SDK).

The final goal of kt's "OPEN IPTV" strategy and the launch of the hybrid business model, OTS is the development of so-called multi-screen (or n screen) service. kt aims at creating industry synergy between kt and all other participants in media business. With this vision, kt can acquire diverse content, secure voluntary developers, promote subscriber loyalty, and also achieve cost-effective system with the revenue share model. On the participants' side, they can create various business models, generate revenue, develop and provide applications with minimum cost, so ultimately the opportunities for specialized and alternative content will increase.

Global pay TV industry faces emerging challenges. New competitors from entire IT industry rush to pay TV industry. It is worldwide expected that the decline of pay TV subscription will accelerate as the new competitors diffuses. TV evolves to be 'smart' & new competitors are entering the market and has been moving through

⁵ Advertising sales should also post steady growth with the increase in the number of subscribers raising advertising effectiveness, as well as the company's bargaining power. Per-person advertising profits averaged KRW8,440 for cable TV operators (top six companies, based on 2009 earnings), nearly 40% higher than KT Skylife's KRW5,900 (based on 2010 earnings).

⁶ In April 2011, Netflix's (online video service provider) subscribers outnumbered Comcast's (US' number-one cable TV operator), and Netflix's market cap continues to set new highs on a daily basis, while US cable TV operator shares are pulling back. With changing industry conditions, such as the diversification of media and digitization of content, existing media players are gradually losing ground. Over the past year, the media industry went through more substantial changes than over the past decade on fierce price competition and dramatic subscriber in-/outflows in the near term. As shown in the cases of the US satellite broadcasting and over-the-top (OTT) service providers (eg, Netflix), those who succeed in attracting customers continue to see re-ratings in share prices.

web TV, connected TV to smart TV. The role of device manufacturers, OS vendors, & content owners are growing in terms of content aggregation & distribution.

Korean media industry is also witnessing similar changes. In third quarter of 2009, the net increase in cable TV subscribers turned negative for the first time since the launch of cable TV operations. In this environment, 2010 alone, the kt media group's (kt & kt Skylife) paid TV service subscribers enjoyed a net increase of 726,000. This surge in net growth would continue long term, as kt further beats rivals on multiple fronts, pricing, bundling, content competitiveness, bandwidth, multi-screen, and customized services using CRM (customer relationship management) technology.

Even if kt has just opened its content source by "OPEN IPTV", it is not sure that it is safe from diverse challenges. In order to prepare for the looming challenges, kt builds a future roadmap at the level of platform, content, and devices.

kt is now upgrading platforms smarter to serve better user experience. Upgraded platform provides technical structure that consumers can enjoy media services conveniently and seamlessly. Further, it can be a base of multi-screen services. kt stretches "OPEN IPTV" windows from fixed TV screen to tablet PC, mobile, and other Internet embedded devices. kt also prepares to build a content storage named as "U-Cloud" last year, which covers all screens. Based on this, kt is trying to satisfy the customer needs by providing more open and smarter service at the level of platform, content, and device.

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