Arthur D Little

TIME INSIGHT

Hybrid TV

Taking Advantage of the Best of IPTV and SatTV

August '08

Until recently, telecom operators have put their faith in IPTV to protect margins and to allow them to occupy all channels to the customer's home – voice, broadband and TV. As a result, DSL operators across Europe have been rolling out CAPEX-intensive networks to provide customers with IPTV and to strengthen their position in the face of growing competition from cable companies. But new approaches are now emerging…

IPTV services have a significant drawback: the coverage achieved is usually considerably lower than for DSL because more bandwidth is required. This is set to become even more significant as HDTV, which requires more than 10MBit/s, becomes the standard. As demand for HDTV services takes off, operators will have to find new ways to increase the coverage of their TV services in order to achieve their original goals.

Many telecom operators are now considering complementing their IPTV rollout with DTH (Direct-to-Home) services. However, Arthur D. Little believes that while DTH as a stand-alone platform is an efficient way to provide 3-Play services, telecom operators should think about offering hybrid TV services as a means to providing their customers with additional IP and Web TV services.

1. How it all began…

Telecom operators originally had two major reasons for entering the TV/content business:

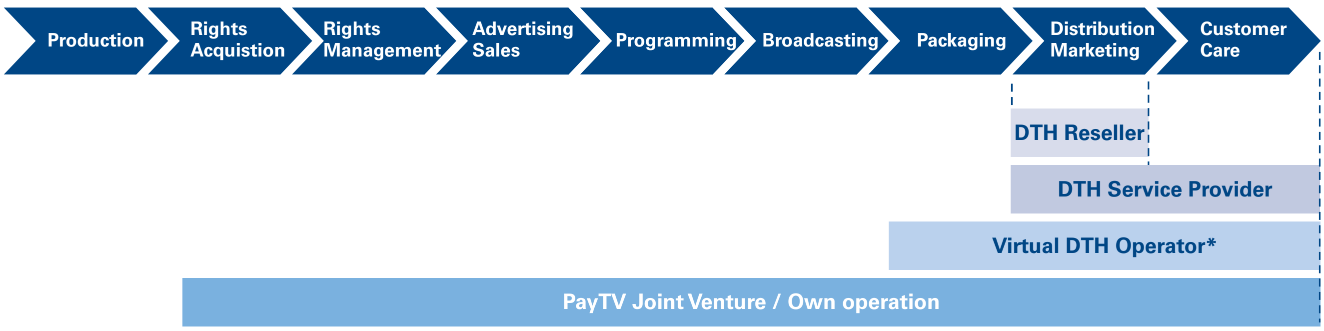
- To stabilise core revenues and margins by reducing churn and increasing ARPU through bundling IPTV offers with broadband access and PSTN services.
- To secure content and advertising revenues.

With IPTV services beginning to take off, operators are now considering increasing the coverage of their service offering. While investing in IPTV infrastructure is becoming increasingly uneconomical in the less densely populated areas that are not yet covered, telecom operators could achieve the desired results by considering a different technology. DTH (TV broadcasting via satellite) is already used successfully in many European countries. Adding DTH would free up capacity on DSL, enabling operators to deliver many high quality channels (on DTH) and interactive value added services (VAS) such as VOD (Video on Demand) with DSL.

2. DTH as a first step

Many operators are already in the process of complementing their IPTV offer with satellite TV in areas where sufficient bandwidth is not available. Satellite TV allows for cost-efficient coverage, freeing up cash for the acquisition of content rights. This strategy also has the advantage of being quick to roll out. Building the necessary infrastructure can take less than six months (depending on the broadcasting infrastructure in place and the option chosen for implementation). Once the infrastructure is in place the only additional investment is for the required CPE (Customer Premises Equipment). With a fixed initial investment, the cost per subscriber decreases significantly as penetration increases. Since many operators offering IPTV services already operate a broadcasting head-end, additional investment in the broadcasting infrastructure is manageable.

Figure 1: Options for setting up a DTH TV business



Source: Arthur D. Little

Depending on market conditions, there is a range of options for rolling out DTH services, from pure reselling to fully integrated own operations:

- **DTH reseller:** sells TV packages of other PayTV providers through its own distribution channels. The DTH offer is branded like the original offer from the DTH operator or co-branded. Value for the customer is based on additional services. The DTH reseller does not broadcast or package, but has wholesale agreements with DTH operators.
- **DTH service provider:** sells TV packages of other DTH operators through its own distribution channels. The DTH reseller can label the packages. Customer care is the responsibility of the DTH service provider. Value for the customer is based on additional services. The DTH service provider does not broadcast or package, but has wholesale agreements with DTH operators.
- **Virtual DTH operator:** distributes packages of channels and pay-per-view content assembled from content providers /broadcasters. The virtual DTH operator differentiates itself by being able to offer a mix of different Paid TV offerings. Further potential for differentiation is based on own labelling and the offering of additional services. The virtual DTH operator does not broadcast, but requires agreements with DTH operators to get access to their packages.
- **Own operation:** the telecom operator sets up an own satellite broadcasting operation either alone or with a partner. All relevant business processes are fully controlled and managed by the operator. The major prerequisite for setting up such an operation is the operator's ability to secure content and to provide customers with set-top boxes. It is also essential to build/acquire the necessary infrastructure, mainly the head-end needed for broadcasting content to the relevant satellites.

Operators should evaluate the options carefully depending on time-to-market and the extent to which they wish to control content. Of course, the necessary investment will vary significantly for each option. However, even starting an own operation is likely to require much lower investment per subscriber than IPTV, even for relatively small subscriber numbers.

Overall, we estimate a total initial investment (for the head-end and CRM system) in the range of a high single digit to a low two digit million (Euro) figure. In addition, CPE (in this case the set-top box) will cost between EUR 80 to EUR 200 per unit, depending on the features. The major part of the OPEX will be running the head-end and renting transponder capacity, which will require approximately one million EUR per year, together with the programme (content) cost; this makes DTH a very cost-efficient, and increasingly affordable, broadcasting platform for providing TV and 3-Play to customers.

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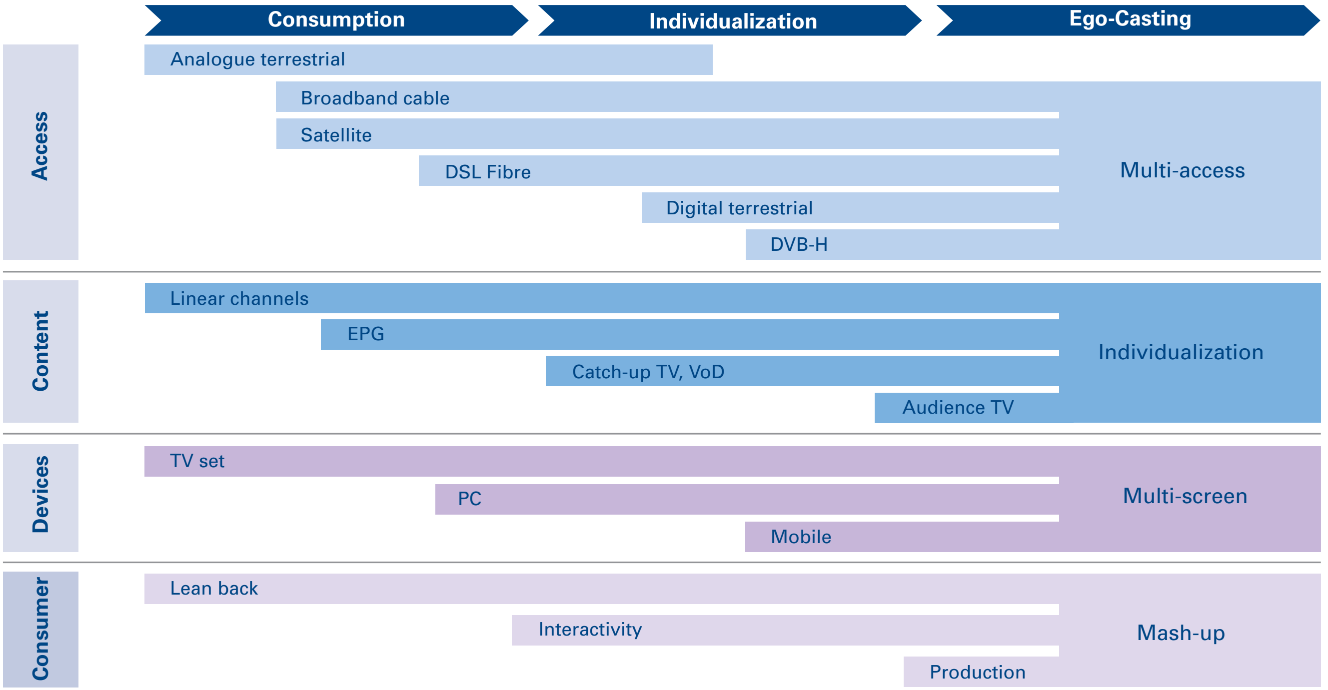
Figure 2: Different phases of Europe's TV industry



Source: Arthur D. Little

3. Trouble ahead…

Satellite TV services such as DTH are a cost-efficient and convenient way to provide TV and 3-Play to customers, not only because of the relatively low CAPEX and OPEX but also because they allow customers to receive linear FTA channels without additional costs. However, telecom operators are likely to face additional challenges in the future. In the medium term, for example, operators will need to enhance their service offering to compete effectively with emerging On-demand and Web TV services.

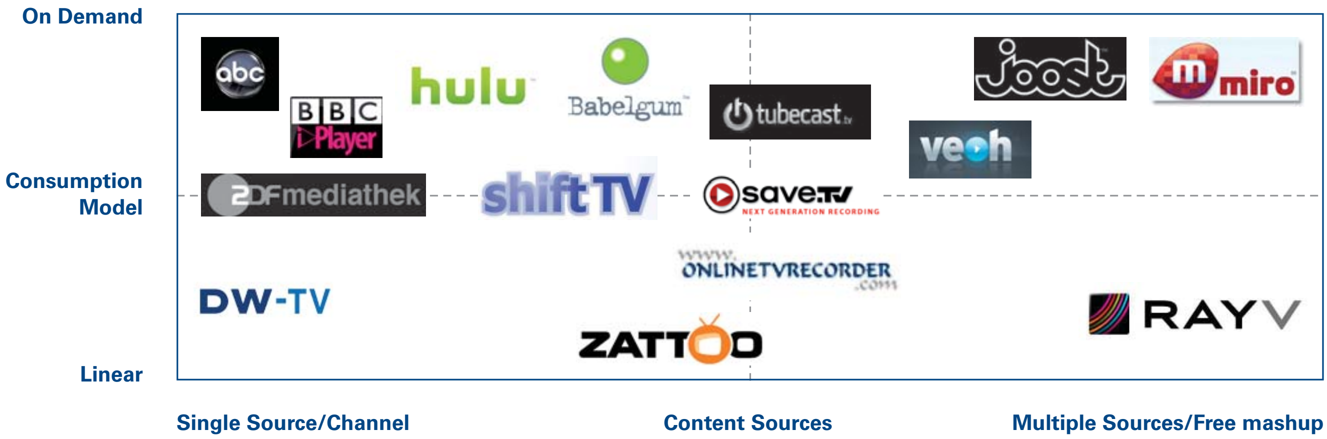
Although TV is currently the most consumed medium, the growth of Internet-based media poses serious competition to classic TV consumption, particularly among the younger generation of consumers:

- Recently, web-based TV platforms, such as Zattoo, have brought the TV world to any computer with Internet access. Web-based PVR services offer the same functionality as timeshift TV, with remotely recorded programmes and series broadcast on TV available on demand. The ability to programme a web-based PVR through the Internet makes these services even more convenient.
- Video on Demand (VoD) services are offered by a range of players. Video-sharing sites, such as YouTube, as well as commercial VoD service providers, such as maxdome, are fighting for subscribers. New platforms are emerging, with most of the large media/broadcast groups launching web-based On-demand TV services. In some instances consumers can view popular shows and series simultaneously on the web and on TV or, as in the case of RTL, can access previews of series on the Internet a couple of days before they are actually broadcast.

We believe that, in the near future, on-demand, ad-hoc consumption will challenge the dominance of linear TV. As Web TV services become more popular, it will be harder to charge customers for linear TV services, even if these are combined with features such as timeshift TV. Competition from content providers will increase as providers try to establish a direct customer relationship, leaving telecom operators out of the loop entirely.

Value-added services will drive the growth of paid TV revenues as customers pay to access their favourite content through any device, wherever and whenever they want. For telecom operators, the key to competing successfully in this arena is to provide a well-thought-out service to customers, making it as easy as possible for them to access content via a one-stop shop. We believe that the most successful services in the future will offer On-demand services for a variety of content sources ('mash-up' content as opposed to single-source content), with the operator playing the role of an aggregator.

Figure 3: Examples of online TV and Video services



Nearly all innovative TV services are on demand services. Mash-up services additionally combine different service clusters

[1] hulu is the Web TV arm of NBC Universal [2] Still in private beta

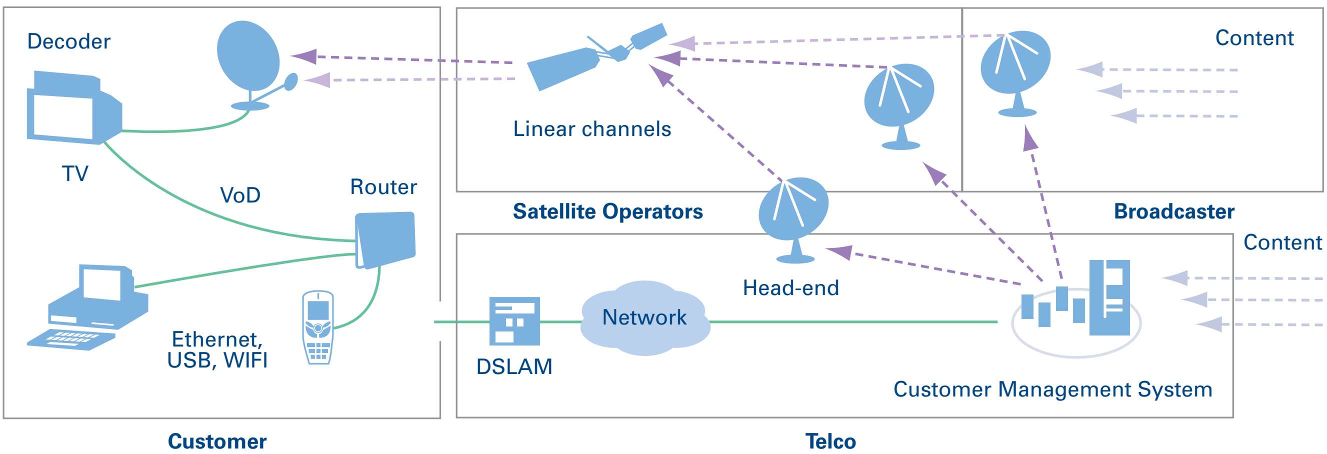
Source: Arthur D. Little

4. Ways out of the trap – hybrid TV services?

While DTH offers a cost-efficient opportunity for telecom operators to complement their existing IPTV infrastructure, they need to avoid being outflanked by developments in WebTV and On-demand services. By combining their fixed-line infrastructure with satellite services, they may be able to stay one step ahead of the competition with superior coverage and services, while at the same time being able to complement existing IPTV services.

Hybrid TV services combine the best of both worlds, with linear TV channels in HD quality and value-added services such as On-demand or timeshift TV being supplied in the most cost efficient way. HD linear TV, which requires 8Mbit/s bandwidth, would be provided through the cost efficient broadband satellite platform. Additional interactive services, typically requiring lower bandwidth, would remain on DSL. The key requirement to offer such services is a hybrid set-top box. These boxes feature a decoder for satellite TV as well as an IP interface for connection to the Internet.

Figure 4: Hybrid TV – Combining the best of two worlds



Source: Arthur D. Little

DTH TV as an opportunity for mobile-only operators, cable players, and Pay TV operators

The options for providing DTH TV services represent an opportunity not just for fixed-line operators, but for mobile-only players, cable operators and pay TV operators too.

Mobile-only players: Given that DTH services need hardly any fixed infrastructure, mobile-only players providing voice and mobile data services could quickly set up and sell triple-play services. In fact, with the increasing market pressure for bundling and multi-play offers, mobile-only players' lack of fixed infrastructure could even become an advantage, since they would have lower overall costs (although a certain market size is required to realise economies of scale when providing DTH services). The value proposition for end-users can be dramatically enriched when buying triple-play services from the mobile operator, namely: mobile voice, mobile broadband and PayTV services. In developing markets, the demand for this value proposition can be as high as 25% of the population, representing a substantial market opportunity for mobile operators and a chance to defend a "mobile only" customer base.

Cable operators: Cable operators could increase their market coverage by complementing their service portfolio with DTH TV. To do this, they need first to address two points:

- If the pure DTH TV market is not attractive enough, how could voice and data services enhance the TV offer? (Partnering with mobile operators could be an option.)
- Given the different cost structures of cable TV and DTH and the need to ensure that the core business is not cannibalised, what is the appropriate marketing/pricing strategy? (This is especially true for the areas where cable infrastructure already exists.)

PayTV operators: PayTV operators could benefit from offering DTH services directly to their customers. First, by partnering with mobile operators, PayTV operators could extend their footprint and use the mobile operator's marketing and sales power to increase their market share and subscriber base by reaching an agreement for the use of the mobile operator's sales channel and joint marketing efforts.

Second, partnering with a mobile operator might also help PayTV operators in gaining important bargaining power needed for the acquisition of exclusive content rights and also open up new viewing channels (mobile, online) for their services.

5. Conclusion

Competitive pressure from the cable companies means telecom operators need to move into the TV/content business now and position themselves in the emerging content market. To benefit from the revenues generated through IP based interactive TV services, telecom operators should try to move up the value chain as quickly as possible. We believe the window of opportunity in this market will not be open for more than two years. In some markets it will be even less. At the moment, there is still a promising opportunity to gain a good position in the value chain. The prerequisites for success are:

- Implement a **quick roll-out** of TV services with **nationwide coverage** of the population, in order to be able to build a brand in the content market.
- Provide customers with an **affordable access** to linear TV by offering bundled services.
- **Gain critical mass for premium content acquisition and move up the value chain**, away from pure (re-)distribution of content, towards the aggregation /mash-up of content.

In addition, to profit from the development of future TV, telecom operators must provide added value to customers. We see potential for added value in three areas:

- **Quicker/easier access:** Customers of telecom operators could benefit from additional access to services that they have subscribed to through their linear TV subscription.
- **Multi-screen availability:** Telecom operators could grant their customers access to certain content on three screens: TV, PC and mobile. Customers would be able to consume their favourite content on a variety of access platforms, no matter where they were.
- **Identification/billing:** As telecom operators have an existing relationship with the customer, they already have an effective identification/billing process. This is particularly important for content out-of-home or abroad. The reason is that the restrictive awarding of access to content rights tends to be according to territory. A simple identification through the IP address is not going to be enough and may restrict customers' access to their favourite content when they are abroad.

Finally, operators need to understand that a TV/content strategy based on a "walled garden" approach, as tried by mobile operators with mobile Internet access, will not work for a fixed-line operator. However, telecom operators do need to build a unique content brand. Initially it will be important to secure attractive (possibly exclusive) content and offer customers access to this content from whichever screen they prefer. Operators will also need to focus on value-added services built around content that they do not control directly.

If telecom operators do integrate these critical components into their content strategy, we believe there is a good chance that they will be able to participate successfully in the content business. It is paramount for telecom operators to move quickly, as the competition from both cable operators and web players is increasing. Relying on IPTV alone will not be enough for telecom operators to avoid being reduced to pure access providers.

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Our Experience

Arthur D. Little uses innovation in products, services, technologies, process and business models to help you achieve growth in the Technology, Information, Media and Electronics (TIME) sectors. Arthur D. Little has deep industry knowledge of the telecoms and media sector, based on extensive client work, addressing market analysis, strategy & performance improvement for operators and content providers. We have recently supported several leading global telecom operators on redefining their customer propositions and technology strategies for IPTV and Hybrid TV services. We are actively involved in the broadcast media sector, particularly in premium content rights acquisition and rights valuation.

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