WE ♥ TV

OTT IN SMART TV

Amazon and Netflix are currently winning market share from linear television across the globe. The only way for broadcasters and other players to combat against this trend is to launch their own over-the-top (OTT) services.

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Why Smart TV?

Amazon and Netflix are currently winning market share from linear television across the globe. The only way for broadcasters and other players to combat against this trend is to launch their own over-the-top (OTT) services.

These OTT services can be created to cater for all screens:

1. PCs and laptops
2. Mobile terminals and Pads and
3. Smart TV screens (both in store and HbbTV)

Currently the mobile applications are raising in popularity. However, when a certain level of penetration is reached the consuming habits lean towards bigger screens.

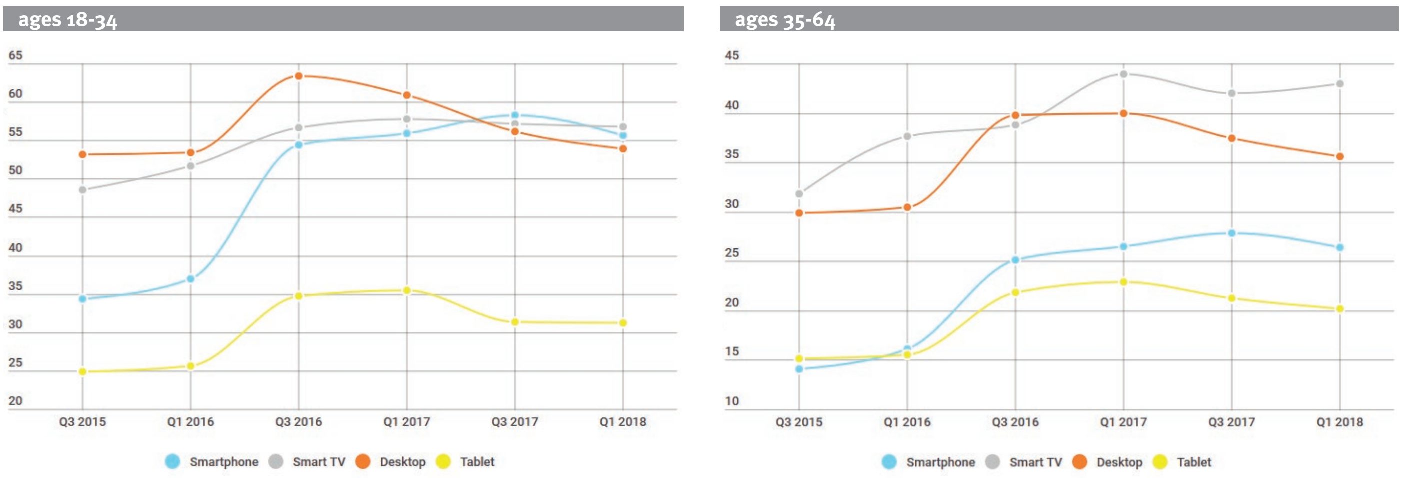
According to the research firm Ampere Analysis, Smart TV makers could be the biggest winners of the OTT boom. Ampere Analysis research shows, that every 10% of homes that have an SVOD subscription, about 6% of homes will buy a Smart TV within a two-year period. This is a dramatic find comparing SVOD uptake in mid-2016 with the percentage increase in Smart TV uptake between 2015 and 2017. There is a clear trend line showing that higher SVOD uptake means higher Smart TV uptake. [i]

"People buy a Smart TV to replace an old television set but also because they want to watch content on apps that are available on them – and this is especially true for older age groups," *Richard Broughton, Executive Director at Ampere Analysis observed.* **"Smart TVs and streaming boxes are crucial for reaching older age groups with OTT. People subscribe to an SVOD service and then they want it on the television."**

Smart TV overtakes mobile for weekly viewing also among Millennials. Smart TVs overtook smartphones as the preferred device for viewing at least weekly in Q1 2018 among 18-34 year olds. Across the 10 markets Ampere has surveyed since Q3 2015, online video viewing shifts have seen a decline in the use of desktops for viewing, while tablet viewing is largely flat. Millennials continue to use mobile devices more often for daily viewing with 35% of Millennials watching video daily on their phones, but their increasing use of Smart TVs (including OTT boxes and streamers) suggests that the big screen viewing experience remains significant. [ii]

It is therefore crucial for all age groups, that smart TV applications are part of the OTT strategy.

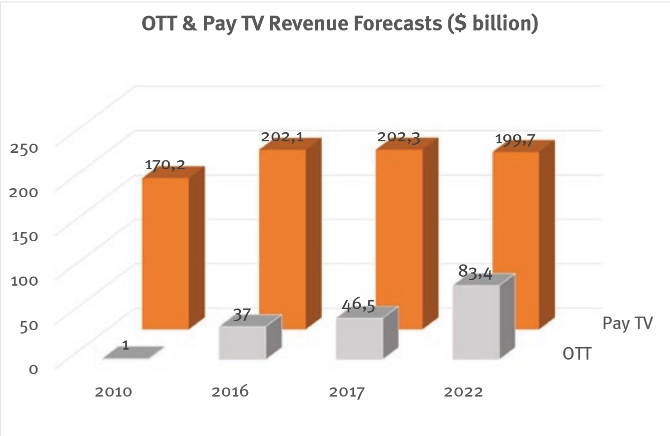
% using device to watch online video weekly



OTT Market Growth

Pay TV and OTT revenues, including SVOD and download-to-own, will bring in close to US$300 billion by 2022, according to a new research.[iii]

Digital TV Research's OTT and Pay TV Forecasts reports predicts the combined total will grow from US$239 billion in 2016 to reach US$283 billion in five years' time.



The contribution of OTT revenues, which comprise AVOD, SVOD, TVOD and DTO[1] in Digital TV Research's working, will increase 14% to 29% by 2022. Its revenues will more than double between 2016 and 2022, and represent 42% of pay TV revenues, with the 2016 figure being just 18%. Pay TV revenues will fall over the same period, though the decline will be small. SVOD subscriptions will reach half the pay TV total by 2022, up from 27% in 2016.

Digital TV Research notes that SVOD subs grew "tenfold" in the period between 2010 and 2016 – unsurprising as both Netflix and Amazon went global during that time and became players in original content – and will double between 2016 and 2022 to 546 million.

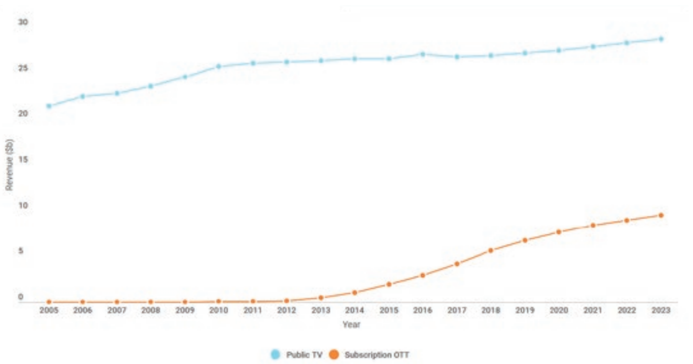
Pay TV subs are increasingly under threat from young customers, who are less likely to consume linear TV, but Digital TV Research claims the medium "is not dead" despite predicted falls in North America. This is largely down to growth in China and India.

The analyst claims there will be one billion subscribers overall in 2022, with Europe remaining flat and Asia Pacific increasing by 92 million. China will add 40 million, meaning a total of 353 million, and India will get 30 million new subs, creating a total of 179 million. The two territories alone will account for half the global pay TV subs by 2022.

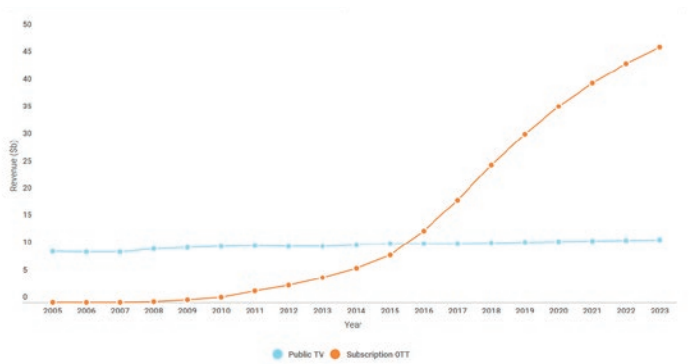
This is also supported by another recent study from Ampere Analysis, see the graphs below.[iv]

Public TV vs Subscription OTT Revenues

Western Europe



Worldwide (excl Western Europe)



[1] "VOD" is short for "Video On Demand". SVOD = subscription vod (You enter into a subvscription, which then grants you access to the service). TVOD = transactional vod (you will pay an amount based on the content you watch). AVOD = advertising vod (ad-based service, free for users)). DTO = download to own, also known as Electronic sell-through (EST), which is a method of media distribution whereby consumers pay a one-time fee to download a media file for storage and later viewing.

Business considerations

OTT providers

The OTT market has changed and includes also other players than Pay TV Operators, TV Networks and Video Distributors.

The key players of OTT now include:

1. BROADCASTERS AND STUDIOS
   Broadcast organizations and TV networks.
2. PAY TV OPERATORS
   Cable operators, satellite DTH providers and IPTV providers.
3. CONTENT DISTRIBUTORS
   The first disruptors of TV business, like Netflix, iFlix, Vimeo and Hulu.
4. MULTI-CHANNEL NETWORKS
   A multi-channel network (MCN) is an organization that works with video platforms such as YouTube, to offer assistance to a channel owner in areas such as “product, programming, funding, cross-promotion, partner management, digital rights management, monetization/sales, and/or audience development” in exchange for a percentage of the ad revenue from the channel.
5. DIGITAL MARKETERS AND BRANDS
   As a new group the digital marketers are entering the OTT business to boost their brands using video content.

Different business models

OTT players are experimenting with many revenue streams to find the right mix for driving greater earnings. Different earning models include:

1. subscription
2. rental
3. electronic sell-through (EST) and
4. advertising models

Electronic sell-through (EST) is a method of media distribution whereby consumers pay a one-time fee to download a media file for storage on a hard drive. Although EST is often described as a transaction that grants content “ownership” to the consumer, the content may become unusable after a certain time period and may not be viewable using competing platforms.

It is typical, that OTT services can have both regular and premium content. Regular content can be consumed for free to attract viewers and premium content, often available only from the OTT service, can be billable.

Many players are using hybrid monetization strategies.

Finnish smart TV application for Sanoma

Implementation

There are a few important things in the technical implementation.

Firstly, the encoding of the videos and availability of correct video formats for smart TV consumption: smart TV requires either MPEG-DASH or HLS format.

Secondly, the selection of TV brands to implement the applications for. Philips and Sony are using Android TV platform, where the source code of an existing mobile application can be used as a template for the implementation. LG and Samsung use their own smart TV platform and utilize HTML5 for the application code.

Thirdly, depending on content many implementations will need a DRM solution, which needs to be selected. Sofia Digital as an application vendor is neutral in the DRM selection and has made implementations with all the major DRM systems. On the HbbTV side Sofia Digital is the creator of the DASH- DRM Reference Application for HbbTV Association. There Sofia Digital implemented Playready and Marlin DRMs.

The fourth question is related to the role of the broadcaster or operator in the development process. Higher involvement in the definition of user experience and user interface can raise the costs a bit, but obviously gives much more control over the project. Sofia Digital has a long background in developing these kind of OTT services for the television, so a model with hybrid responsibilities and close co-operation allows for deployment of best practices from all around the world.

Fifth question is the testing of the developed applications. Sofia Digital has a television zoo of over 40 devices from all the major manufacturers released to markets since 2015. Sofia Digital can therefore do the testing of the applications on behalf of the client even before the applications are submitted to the manufacturers application stores which saves time in the development process. Sofia Digital provides a turn-key delivery model and where the submission process is included into the delivery.

The technical key considerations can be summarized as follows:

1. Availability of video material in the right format (MPEG-DASH, HLS)
2. Selection of TV brands to implement the OTT application (Android and/or HTML5)
3. Selection of a DRM system
4. The customer's role and involvement in the UX and UI definitions
5. Application testing and app store submission process

From the business perspective it is important to select a partner, with whom it is possible to pivot the earning strategies of the developed platform. There are many ways of monetizing the OTT platform and the initial assumptions of earning model mix might not be the best one. Once you work with Sofia Digital you notice that further development of the platform and earning models is quick, easy and cost efficient.

Multichannel development including HbbTV

It is important to note, that HTML5 applications are suitable also for HbbTV (hybrid broadcast broadband television) implementations with only minor changes in the code. Therefore, a multichannel strategy, where both smart TV and HbbTV play a role can be cost efficiently supported by Sofia Digital. Sofia Digital has a long experience in making both HbbTV applications and smart TV applications and has made numerous services in both technologies creating savings for its clients in the past.

[i] http://www.v-net.tv/2018/04/27/for-every-10-of-homes-with-an-svod-subscription-6-will-buy-a-smart-tv-within-two-years/
[ii] https://www.ampereanalysis.com/blog/1a8d25d3-c489-4e4e-9118-7f62acac52f1
[iii] https://www.digitaltveurope.com/2017/12/05/ott-pay-tv-revenues-to-near-300bn-research/
[iv] https://www.ampereanalysis.com/blog/9bf44b10-6bf3-433b-b9b3-e74fb1ef3337