TV TechCheck
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Cord Cutting 2.0: Making it Easier

A number of recent developments appear to be leading to the next inflection point in the consumer movement away from traditional multichannel video programming distributors (MVPDs, or "cable" and "satellite" TV) – a process commonly referred to as "cord cutting." The first quarter of 2015 has already shown a marked uptick in subscriber losses from MVPDs, but a number of new and expected offerings may accelerate this further, with a potential impact on local over-the-air (OTA) television's involvement, as well.

First, some background: U.S. consumers have always valued convenience and simplicity in their television viewing. The tradition hearkens back to the days when over-the-air television broadcasting was the sole source of TV content, and the only user controls were volume and channel selection. This long-gone legacy persisted for a while with the use of Channel 3/4 modulators as the sole method of getting a video signal originating from a non-broadcast source into analog televisions. End-to-end (E2E) pass-through architecture also allowed users to select from a broadcast source or a local recording without switching between devices. Direct video inputs eventually came along, but from the earliest VCRs, through MVPD set-top boxes and other devices, the preference has remained, keeping consumers averse to having to frequently switch between sources feeding their TVs.

Consumer electronics technology development in the meantime has not made it any easier for users to gain agility in this respect. Many homes with complex video routing setups end up with only one family member (or fewer) having complete understanding of the system, resulting in numerous pleas for help from the other residents of the home in accessing the content they are trying to watch.

Meanwhile, the time-shifting behavior developed during the VCR era, and carried forward to the current DVR, has also argued for all content to be singularly sourced, and preferably displayed on a unified grid-based electronic program guide (EPG). Multiple tuners (all connected to that single source) are also expected in today's DVR, to avoid conflicts between recordings of simultaneously scheduled programs on different channels.

More recently, the situation has become both more convenient and more complex: It is now common to encounter multiple HDMI inputs and WiFi/Ethernet connectivity on "smart" TVs, along with the coexistence of real-time channel distribution and on-demand (typically Internet delivered) content. Control features added to the HDMI standard have allowed some measure of device-to-device communication and interoperability, yet throughout it all, many consumers remain generally averse to jumping around between sources – especially if they each require a separate remote control – and still seem to largely prefer a singular user interface for all available content.

Although some viewers may have become accustomed to more "browser-like" behavior for discovery of *on-demand* content (even leading some MVPDs to change their video-on-demand [VOD] listings' appearance to simulate such interfaces), it seems unlikely that these viewers would enjoy having to do the same bouncing across the Internet to multiple sites – potentially each with their own logins and connect times – for access to different broadcasters' channels.

Finally, yet another emerging preference is for portability of content to mobile devices, accommodating offline viewing on authenticated devices.

So that brings us to the current time: Enter the latest generation of navigation devices and content services, which provide users with a variety of content choices on their user interfaces, presenting it to their viewing devices of choice from a single physical source. This environment is by no means mature, and is challenged by the requirement to combine an ever-widening range of content sources and delivery technologies.

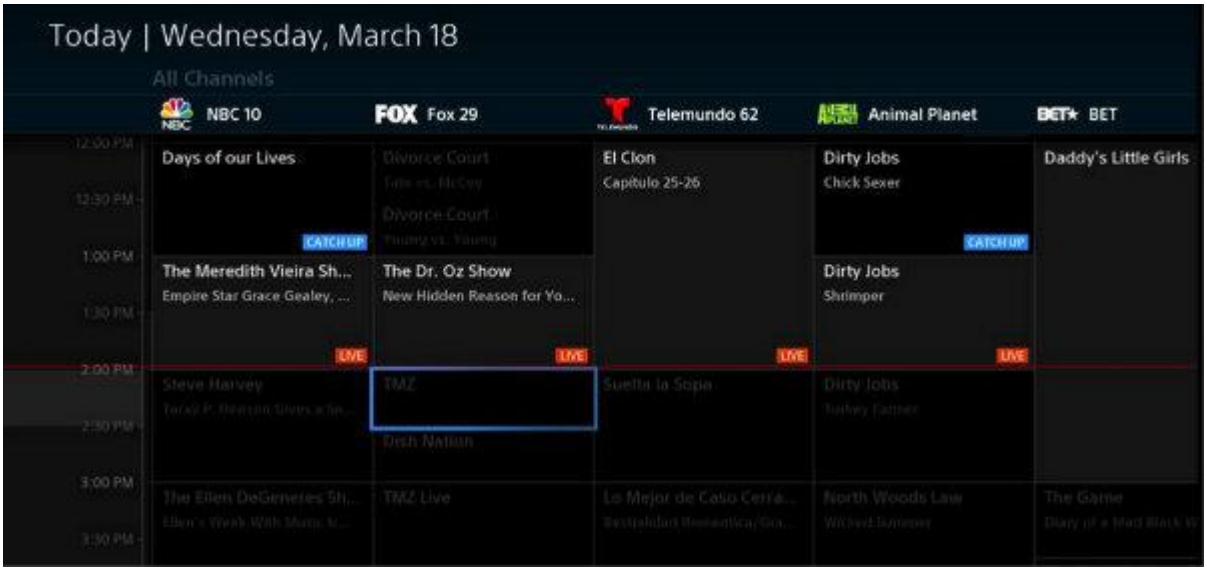
An Apple TV home screen with familiar "app"-based navigation common to many OTT services.

OTA/OTT Scorecard

Now couple this technical environment with today's growing consumer preferences for personalization, along with a growing displeasure by some with MVPDs' quality of service and/or cost, and a whole new consumer behavior regarding TV consumption is engendered. As a result, a variety of recent offerings attempt to satisfy all these consumer demands – namely greater choice (including à la carte channel selection), access, control, flexibility, cost effectiveness, portability and simplicity.

Given all this, a few recent developments seem specifically noteworthy for broadcast TV:

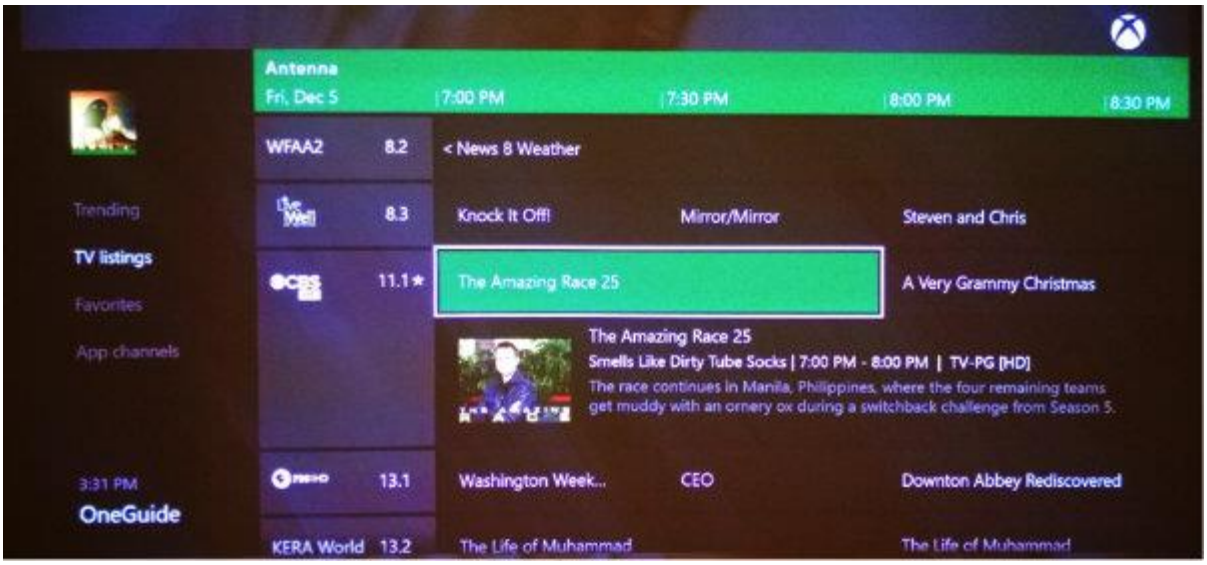
1. Over the past two years, a number of companies have released set-top box (STB)-like devices that combine over-the-top (OTT) Internet TV access with OTA TV tuners. While Smart TVs also provide this capability, they can require more complex user intervention to switch between services, whereas the STBs may provide easier overall navigation. Moreover, some of these STBs have integrated storage and multiple tuners for DVR functionality, and/or attempted to provide a singular guide for both OTA and selected OTT services. Such devices have come from TiVo, ChannelMaster, Roku, Boxee, Simple.TV, Mohu and others, and their improvements continue.
2. CBS continues to roll out its Syncbak-based *All Access* service, by which selected CBS stations (all the network's O&Os and a growing number of affiliates, at present) offer most of their broadcast content online in real-time to local users, in addition to on-demand and portable access to TV series content.
3. Other TV networks are using their own portals (such as *Hulu* and *Hulu Plus*), along with TV Everywhere authentication, to provide online access and content portability to their programs, although to date this has applied only for on-demand content, not real-time station streams.
4. At least two recently launched services (*Sling TV* from Dish Networks and Sony *Vue*) offer packages of real-time television channels to online users. While these services offer a way to receive certain non-broadcast channels (mostly "basic-cable services," including ESPN) via OTT TV that some cord cutters have welcomed, to date only the Vue service also offers some local broadcast TV channels, and only in a few markets so far. Other differences between the services are Sling TV's requirement for a new hardware device, and its offering of content portability, while Vue works only on a screen connected to a Sony PS4, but requires no additional hardware for existing PS4 users.



Example guide screen from Sony Vue service, showing some local broadcast stations in Philadelphia.

5. Microsoft's Xbox system has for some time offered a method to converge OTT TV apps and services with MVPD-provided service (usually coming from an external STB to the Xbox via an HDMI input). This allowed the user to watch both OTT and traditional MVPD-provided TV through the Xbox, without switching TV inputs. More recently, however, it announced the addition of an OTA ATSC tuner on a USB stick, allowing users to forego MVPD service for local broadcast reception on the Xbox. In this way, the Xbox joins the devices described in #1

above, but with the addition of a powerful gaming console also in a single device (like the Vue service on the PS4, although to date the PS4/Vue has no OTA TV reception feature).



Xbox One guide screen, showing some local TV stations (including multicasts) received OTA in the Dallas market.

6. Another familiar OTT device is Apple TV, but unlike those mentioned in #1 above, it has not incorporated an OTA component. Most recently, however – and perhaps most interesting to TV broadcasters of all these recent developments – it appears that Apple is delaying release of its next Apple TV generation to incorporate (at least some) broadcast TV services. Given that Apple is apparently in negotiations at present with broadcast TV networks on this upgrade, it does not appear that this new content will flow to the device via the addition of an OTA tuner (which would require no prior arrangements with or grant of rights from broadcast content owners). Thus it appears that Apple is working to include broadcast TV content within the Apple TV – service – offerings, delivered as part of its OTT service package–similar to the Sony Vue service. If this includes not just on-demand episodic TV series access, but live local broadcast channel streams, it would further differentiate the Apple TV service from many of its OTT service competitors – a strategy also represented by Apple's addition of HBO to the Apple TV service package earlier this year, which is unique among OTT players to date.

Some Assembly Required

Thus many in the industry continue to work toward developing a simple offering that combines broadcast and non-broadcast television offerings, in both real-time and on-demand forms, ideally from a unified portal, network or device. Cord cutting, while appealing on its face, still involves some effort by users, and requires a willingness to put up with a level of inconvenience at present. Users also need to be flexible and patient enough to tolerate frequent updates, research new offerings, evaluate multiple service tiers/costs, possibly juggle multiple subscriptions, and almost certainly deal with the latency and rebuffering common to many streaming services, particularly during prime viewing periods.

But given the amount of investment and development by so many in this space at present, and the continued growth expected as UHD offerings are added, these difficulties may subside over time. The "holy grail" for new TV services seems to have as a primary attribute the return to simplicity of former

times, while offering the flexibility to access all the content any given user may want – from an ever widening set of choices. The emerging ATSC 3.0 standard also anticipates a hybrid of OTA and online services from broadcasters, and as consumer equipment supporting that standard hits the market in the coming years, such multi-platform delivery to a single device may become routine.

Broadcasters should continue to monitor this fluid environment, and participate where they can, to maximize the ability of their content to reach audiences through multiple platforms – simply and conveniently.

Important Dates and Upcoming Events

Infocomm 2015
June 13 – 19, 2015
Orlando, Fla.

Siggraph
August 9 – 13, 2015
Los Angeles, Calif.

IBC
September 10 – 15, 2015
Amsterdam, Netherlands

2015 IEEE Broadcast Symposium
October 14 - 16, 2015
Orlando, FL