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The Gateway Era

As Netflix and other over-the-top (OTT) video services gained traction, incumbent pay TV operators feared a mass exodus of subscribers to these cheaper, Web-delivered rivals. Yet the dreaded rash of “cord cutting” has never fully materialized. That’s not to say that OTT services aren’t having a profound impact on the video market, they are. But rather than subscriber loss, it’s coming in the form of consumer expectations. To wit: Netflix, et. al., are conditioning consumers to expect a seamless, unified video content experience no matter which device they happen to be using, no matter where they are.

For traditional pay TV operators eager to deliver a similar experience, the race is now on to deploy video gateways that can transcode video to IP for delivery to tablets, smartphones, game consoles and Smart TVs around the home. While gateways won’t deliver a true “TV everywhere” experience just yet (since they can’t reach outside of the home), they do position pay TV operators to satisfy a more mobile TV customer.

The question is: what kind of gateway will do?

Off With Their Heads?

The very term “gateway” is something of a catchall. It can refer to a whole home DVR device, like Dish’s Hopper, which centralizes the tuners, DVR storage and conditional access into a single set-top box (STB) connected directly to a primary TV with connections (via MoCA or Wi-Fi) to client boxes on additional TVs. It can also refer to a converged device that delivers telephony, a broadband modem, and tuners, all in a package designed to sit anywhere in the home except connected to the TV. This so-called “headless” gateway ditches the video output and instead delivers IP video throughout the home via DLNA or MoCA to client boxes and mobile devices.

While “headed” gateways, like Dish’s Hopper and DirecTV’s Genie, are already on the market and projected to grow sharply over the next five years, headless products may not reach subscriber’s homes in force until late 2013. When they do, it is likely to be cable operators leading the charge, as they are in need of a QAM-to-IP solution in the home.

Once headless gateways do arrive, however, they should prove attractive to subscribers and operators alike. One reason: they can be installed outside the home, giving operators easy access in the event repairs are needed. Gateways (both headed and headless) are also viewed as a potential cost saver. While the gateway itself is a premium device, each household only needs one. To feed linear or DVR content to the roughly four TVs per U.S. home, operators can install inexpensive IP-based thin client STBs or even rely on Smart TVs and game consoles to stand in for the STB entirely.

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Indeed, while IP client boxes are likely to be the preferred solution for multi-TV households over the short term, retail CE devices could play an ever larger role in the future as stand-ins for the STB in the longer term, fueling additional cost savings for the operator.

Gateways, however, are not evolving in a vacuum. The same multi-screen, multi-room imperative that is driving gateway deployment is also pushing operators to examine cloud-based solutions as well, particularly to reach consumers when they're out of their home network environments. Some gateway vendors, like ADB, see a hybrid approach developing where the cloud handles TV everywhere beyond the home and gateways pick up the job on the home front.

Broadcasting TV on Mobile Networks? Coming to Screens Soon

The changes in today's television landscape are downright alarming or exhilarating depending upon one's point of view. No sensible argument can be made that recent changes are anything but foundational. And the actions of some incumbent TV service/signal providers illustrate the marrow-deep realization that they must adapt to the new landscape or die.

Many traditional TV program providers are preparing big changes in infrastructure and business models to keep up with this new reality that includes delivering content to consumers on all devices without regard to geography or time. This requires, among other things, using Internet Protocol (IP) to complement and/or supplant current distribution methods. It also requires maintaining valuable spectrum and making the most efficient use of it.

Traditional TV incumbents aren't doing so well in the fight to maintain spectrum. Last year the World Radiocommunications Conference (WRC-12) agreed to introduce mobile services (on a co-primary basis with broadcasters) in the 700 MHz band in Region 1 (Africa, Europe and parts of the Middle East). The 800 MHz band has already received the co-primary treatment. It had been previously thought that allocation for mobile services in this band would not be considered until the WRC in 2015, but the press for additional spectrum for mobile services mostly in Africa and the Middle East has accelerated the timetable. What might this increasingly constrained resource mean for traditional broadcasters? Putting aside for a moment the realities of regulatory policy and economics, the following technical options, both current and future, are being studied/implemented/ designed to prepare for such a time:

- For terrestrial digital TV markets that were among the first to transition from analog to digital TV (about 14 years ago) adopting the latest compression and transmission efficiencies is the most obvious choice. This is assuming that all broadcasters will continue on a "next-generation technology" path. In Germany, where terrestrial TV is used by only about 10% of households, the largest broadcaster – RTL – says it won't continue sending out DTT signals after 2014. Therefore, Germany will likely skip out on DVB-T2 and go to the other more widely-used distribution platforms – cable, satellite, and even perhaps, cellular networks – to distribute TV programs now received terrestrially.

How could this "live TV" programming now being transmitted terrestrially be delivered? In theory, it could be off loaded to the Wi-Fi network, but given the amount of current congestion there, it's not a practical solution.

- Those now distributing TV content terrestrially may consider other ways of broadcasting. Professor Ulrich Reimers of the Technical University of Braunschweig (and the former technical head of the DVB Project) told attendees at DVB World in March of work he and his engineering team are doing to enable broadcasting video over an LTE (cellular) network – LTE with evolved Multimedia Broadcast Multicast Service (eMBMS) and a tower overlay over LTE-Advanced. Verizon has already announced that it will introduce LTE broadcast for select events in 2014. These initiatives are still in development and testing, but their commercial applications are on the horizon.

These new distribution methods, of course, are only technical solutions that don't necessarily factor in business or political implications. Whether or not there can be so radical of a change is yet unknown but the fact it is being contemplated is in itself radical.

New Report Available

DIGITAL TV RECEIVERS: WORLDWIDE SHIPMENT FORECASTS

(2011-2017 | 7th EDITION)

DTH satellite STBs, digital cable STBs, IPTV STBs, and DTT STBs and IDTVs are all forecasted in this report that provides a thorough and concise snapshot of the future of digital TV devices.

For more information, please visit
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Chinese TV Makers, a Not so Distant Threat?

Chinese brand TV makers have no shortage of ambition for entering the U.S. market. Although names like Hisense, Skyworth, TCL, and Haier may not be household brands in North America, they're the major TV suppliers in the domestic Chinese digital TV market according to DTC's latest domestic Chinese television market research in conjunction with China-based RedTech Advisors.

In the healthy and still growing Chinese digital TV market, the bulk of LCD TVs sold are supplied by domestic Chinese suppliers. In 2012, of the 59 million sets shipped into the distribution channel, 46 million were from the top supplying domestic brands including Hisense, Skyworth, TCL, Changhong, Konka, and Haier. LCD TV domestic brand market penetration reached 78% in 2012, up from 71% in 2011.

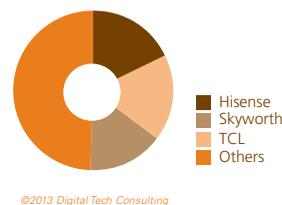
With the success in the domestic Chinese market, Hisense, Haier and TCL are accelerating their momentum in the U.S. TV market by promoting inexpensive sets with advanced features to grab market share from Japanese and Korean competitors and build a reputation as international brands. To put the foot in the door, Chinese television makers appear to be foregoing profits by undercutting prices. For example, on average a 50-inch Chinese brand set with Wi-Fi connectivity and a Web browser sells for 20% cheaper than the equivalent set from a traditional big brand manufacturer. However, being a low-cost brand is not the final goal of Chinese TV brands. They may be cutting price for entry into the U.S. market but they are making big R&D investments. Hisense for instance, is constructing a new 430 acre R&D facility in Qingdao to satisfy the needs for developing advanced multimedia displays and other technology innovations.

By satisfying U.S. consumer preferences for larger screens, Chinese television makers have an opportunity to gain share in the international market. They've succeeded in selling large-screen TVs to Chinese consumers – according to DTC's domestic Chinese television market research, the sales of TVs with screen sizes over 42" have accounted for 78% of overall LCD TV sales in China in 2012. The goal is to leverage that success when entering the U.S. market.

Chinese suppliers aren't leaving out the bells and whistles either as they've shown models that include Google TV, built-in streaming services, 3D, OLED, and ultra-high definition. Chinese brands may just be taking a page out of Samsung's playbook when it first entered the U.S. market with low prices to gain brand recognition and later focused on innovation to compete with Japanese brands. Riding the wave of huge domestic success, Chinese manufacturers are poised to make a significant splash in the U.S. market.

DTC's Domestic Chinese LCD DTV Quarterly Tracking Service, which reports on quarterly shipments by screen size, suppliers, chip suppliers, and video compression technology, is available for 2010-2013.

2012 Estimated Shipments of Domestic TV Brands in China



HOW DO YOU PLAN FOR AN ANALOG-TO-DIGITAL TV TRANSITION?

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Every member of our team has been directly involved in analog-to-digital terrestrial TV transitions around the world by evaluating technical standards and specifications, overseeing transmission infrastructure installations, helping government agencies and retailers with consumer receiver procurement, managing government

programs for receiver distribution, and developing consumer education programs.

Because no two transitions are alike, the DTV Transition Group responds to the unique culture, economics, and goals to tailor a DTV Transition to specific country conditions. We take a holistic approach to a transition, having assembled a team with expertise in government relations, retailer and consumer education, technology, market conditions and equipment suppliers. A transition is not about moving from one technology to another. It is about transforming an entire communications system to improve communications for citizens and governments. For more information, please contact Myra Moore at 214.915.0930