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The US Pay TV Business Is a Sinking Ship

-All the Major TV Networks Are Going Direct-to-Consumer OTT

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-It's a Broadband Future for Cablecos and Telcos

The latest quarterly earnings should prove beyond any doubt that traditional linear TV is dead, and the pay TV business as we know it is undergoing a dramatic transformation.

Pay TV companies, who are all also broadband companies (save for satcos) in the US, have collectively reported a better-than-expected Q3, but the trends already in motion won't be reversed. All the major TV networks know this, and are now signaling openly their plans to aggressively pursue viewers directly through Internet-delivered subscription services.

Meanwhile, the collective broadband subscriber base continues to grow. Broadband/

pay TV providers in the States are busy testing out new types of skinny bundles and streaming bundles in order to grow their shrinking pay TV subscriber bases, and leverage their broadband networks. These efforts will accelerate in 2016, as we see pay TV providers introduce more and more flexibility and multi-platform innovation for their bundle-based TV offerings.

And in the coming year, the economics of linear TV are poised to begin shifting dramatically away from overnight and real-time ratings towards total, multi-platform audience measurements over longer time frames, to compensate for viewers' insistence on watching TV when they want, not according to a programming schedule.

The shake-up in linear ratings will come as TV networks begin pushing their own data more seriously to advertisers, as **Nielsen** finally

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Marvell's G.hn Beats Extollo's HomePlug AV2 in Lab & Field Tests

- Won in All Scenarios and in the Worst Case Environments

In June 2015, *CNET* said the **Extollo** LANSocket 1500 power-line adapters, which are based on HomePlug AV2, had the "best power-line performance to date." At the end of last month, October 2015, the test lab Network FX, a subsidiary of **CableLabs**, said that, after conducting tests, G.hn adapters using **Marvell's** chips "performed better than the Extollo [HomePlug AV2] devices in the lab and in the field under a variety of test conditions in a single network and in multiple networks."

The main chipmakers promoting G.hn (**Marvell** and **Sigma Designs**) and HP AV2 (**Broadcom** and **Qualcomm**) are members of CableLabs, which owns Network FX, as are MoCA chip and equipment makers.

Background

- Marvell contracted for Network FX to perform both the Lab Repeatable Power-line Testing and the Field Home Testing.

- Marvell purchased the Extollo adapters from **Amazon** on August 20, 2015. No firmware upgrade was available on Extollo's Web site. Extollo's adapters have **Broadcom's** HPAV2 MIMO power-line chipset.

- Marvell provided Marvell-branded adapters that are based on its reference design and which it makes available to equipment makers. They are not available at retail but the exact same chips are in **Comtrend's** G.hn adapters that are available at retail. Consumers can and should download the latest firmware from Comtrend's Web site. **Amazon** sells a pair

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“Every day it becomes clearer that the trends we anticipated are happening even faster than we expected.”

“Live viewing of television is contracting as a percentage of total viewing.”

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rolls out its more robust multi-platform measurements and as competitors such as **comScore** begin to more aggressively challenge Nielsen in the TV currency market – ie in viewership data.

Time Warner CEO Jeff Bewkes summed it up nicely during his company’s quarterly earnings call this week. “Every day it becomes clearer that the trends we anticipated are happening, and in some ways, they’re happening even faster than we expected,” he said. “For many consumers, the television viewing experience is stuck in the Bronze Age.”

For TV Networks, It’s OTT or Die

There was no mincing of words during this latest round of quarterly earnings calls: the TV networks were eager to discuss their future plans outside the traditional TV ecosystem as indicators of their companies’ strength heading into the Internet TV future.

“We believe that the opportunities [of OTT] outweigh the challenges,” Chris Albrecht, CEO of **Starz** said this week. “We’re now looking at what’s clearly numerous opportunities for Starz to be distributed in ways other than MVPDs.” Starz has decided it will launch a direct-to-consumer offering next year. [See “Starz Gives in to Its Inevitable Internet TV Future,” pg 8].

21st Century Fox’s CEO James Murdoch said this week his company is considering a direct-to-consumer launch too, though he didn’t say for certain that the company will do so. “IP streaming video construction, this is something that we’re very excited about,” Murdoch said. “I think over time, the streaming entertainment business and streaming television business is much more attractive [than in the past].”

Discovery Communication’s CEO David Zaslav made similar comments about launching an OTT service in the States sometime in the future. Discovery already operates an SVoD service across Europe, called Dplay. [See “Discovery Eyes Internet TV Launch in US,” pg 10]

And **CBS**’ Les Moonves seemed eager to embrace the chaos, as his company is the only over-the-air broadcast network to launch a direct-to-consumer Internet TV service, and its pay TV network Showtime was the second premium network to launch such a service, behind HBO.

“No matter how rapidly the world continues to change, we have positioned ourselves to benefit,” Moonves said this week. The future looks bright for CBS, which announced this week it has begun creating programming exclusively for its OTT service [See: CBS Is Now Creating Original Content for its Internet TV Service, pg 9].

CBS’ chief financial officer, Joseph Ianniello, echoed his confidences and added: “As we continue to grow our direct-to-consumer initiatives, we expect CBS All Access and Showtime over-the-top to be contributors to our operating income growth next year.”

Time Warner expects HBO Now, the stand alone OTT service, to begin contributing meaningfully to its income growth next year, too. These early movers will have the advantage in new Internet TV ecosystem.

On-Demand Audiences Now Outpace Live Linear Audiences

Meanwhile, the industry is getting ready to shed live audience measurements, in favor of a broader perspective that will be better able to measure a show’s multi-platform and time-shifted audience.

“Our viewers are increasingly choosing when and how they experience our programming,” said Lachlan Murdoch, chairman of 21st Century Fox, speaking at the company’s quarterly earnings call. “Live viewing of television is contracting as a percentage of total viewing, especially in the younger demographics coveted by advertisers.”

There’s no question linear TV is on its way out. Consumers have made clear they much more prefer to watch TV shows and movies according to their own personal schedules, not the TV program schedule. Murdoch pointed to Fox’s show “Empire.” Its second season premier garnered a total of 12 million viewers across its live broadcast and same-day time-shifted viewing. But the audience for that episode more than doubled across a 30-day span and across multiple platforms. That means more viewers watched the premiere episode time-shifted than live.

James Murdoch added that over half of the company’s ad revenue is sold in the C7 window now. The same trends can be found across its other shows: the audience for “Scream Queens” grows 130% when multiple-viewing is included. That means, once again,

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more viewers watch that show time-shifted than live.

CBS reported similar trends in audience for some of its shows. The season premiere of “Limitless” in September drew 10 million viewers; the audience for that episode grew to 17.5 million time-shifted in the following two weeks, “and that number continues to rise as we speak,” Moonves said. “This phenomenon is happening across our schedule.”

Fox’s nonlinear audience is growing by a third year-over-year; and 10 of CBS’ shows experience audience increases of 3 million or more when nonlinear viewing is counted.

“It’s a testament to the fact that premium broadcast content is in more demand than ever, but it also illustrates the needs for the industry to move to modern ratings currencies,” Lachlan Murdoch said.

That move will occur in 2016, whether from Nielsen, other third party measurement firms, or the content owners themselves. Nielsen is getting ready to launch its Total Audience Management system next month, which will track viewing across DVRs, VoD platforms, net-top boxes, game consoles, smartphones, tablets and PCs. comScore, specializing in digital measurement, is looking to challenge Nielsen in this area, and it recently acquired **Rentrak** in order to better do so.

Broadband Is the Future of Pay TV

The collective pay TV industry lost subs overall in the last quarter, but it did better than anyone expected, particularly **Comcast**. Still, the broadband business is the future for these companies, as demand for faster speeds and more bandwidth continues to skyrocket among consumers.

Collectively, broadband subscribers will outpace pay TV subscribers by as many as 10 million by the end of 2016, according to **Moody’s**. For many broadband/pay TV companies in the States, broadband subscriptions have already surpassed pay TV subs. Moody predicts there will be 57 million broadband customers by the end of 2016, and 47 million pay TV subscribers.

“This change in subscriber demand represents

a fundamental shift in consumer appetite and the economics of the cable business model,” said Jason Cuomo, VP and senior analyst at Moody’s. In fact, Cuomo believes the growth in broadband will be the only thing to save those companies whose main money-maker has been pay TV. “The loss of video subscribers is a fundamental weakness, but broadband demand and pricing actions are more than fully offsetting the negative video trends,” Cuomo said.

Broadband will become even more important to service providers as consumers watch more and more video online.

The Internet TV Space Continues to Grow

Whether it be more networks launched direct-to-consumer OTT services, more Web services added video to their offerings, or more broadband/pay TV providers releasing streaming skinny bundles, it’s clear the Internet TV space will continue to see significant growth in the coming year.

Internet TV Video Services	
(already available)	(coming soon)
CBS and Showtime	Starz
A&E Networks	Disney
AMC	NBCUniversal
HBO	ESPN
Viacom	Comcast’s “Stream” and “Watchable”
Verizon’s Go90	TWC
Dish Network’s Sling TV	Charter – who just acquired TWC
Sony PlayStation Vue	CenturyLink
	Apple TV

The broadband/pay TV providers will continue to launch new streaming video products next year, which will compete with the other imminent Internet TV products from **Apple**, and perhaps **Amazon**, **Roku** or **Google**. 2015 was the first year of the Internet TV era, and it’s clear that 2016 will see even more significant changes in the traditional TV and pay TV industries.

As CBS’ Moonves told shareholders this week: “There’s no question that there’s going to be a change from the 180-channel universe.”

“This phenomenon is happening across our schedule.”

“There’s no question that there’s going to be a change from the 180-channel universe.”

“ARRIS is expected to launch a G.hn powerline adapter that will have the same Marvell G.hn chips.”

“Network FX found the same results that Rider Research did in two homes in terms of packet size.”

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for less than \$80:

<http://www.amazon.com/Comtrend-G-hn-Powerline-Adapter-Kit/dp/B00X3GX99C>

ARRIS is expected to launch a G.hn powerline adapter that will have the same Marvell G.hn chips. Comtrend and ARRIS adapters both have Marvell’s 1 Gbps powerline G.hn chipset, not its new 2 Gbps chips, which are not due out until 2016.

- The IPTV field tests were conducted in a house in Colorado with 4,850 square feet, two living floors plus a basement. The source for the video streams was located on the first floor. UDP IPerf commands were used to simulate HD or 4K streaming to each IPTV client. The 4K video had 30Mb per stream. By comparison, **Ericsson’s** Mediaroom IPTV 4K HD, which many telcos use for their pay TV technology, only streams at 12MB per stream.

Test Results:

Network FX found the same results that **Rider Research** did in two homes in terms of packet size. At higher packet sizes, the throughput of Marvell’s G.hn and Extollo’s are about the same at 70dB of attenuation. At 80dB and 90dB of attenuation, Marvell results were better than Extollo’s. At lower packet size (82 bytes), the throughput of Marvell at all attenuation levels was higher than Extollo’s.

When testing for TCP throughput in neighboring networks at 40dB attenuation, the results showed that Marvell devices can provide higher throughput and lower latency than Extollo for all packet sizes. The term neighboring networks refers to residences in MDUs, a prime target for telcos that are prospects for selling G.hn adapters.

- The G.hn products did not have any packet errors or drops, which Marvell said is the “ideal technology for video delivery in the worst tested environments.”
- Marvell performed better in neighboring networks’ test setup for all test parameters (ie lowest/average/higher packet size).
- In testing network stability under “bursty” traffic conditions, Network FX said Marvell devices completed the test without dropping a single packet at a throughput rate of 80 Mbps. The Extollo product showed a 7-8% packet loss. Network FX

said, “This indicates that Marvell devices are more stable under bursty traffic conditions.”

Network FX said Marvell won in all scenarios and in the worst case environments in both the Lab Testing and Home Field Testing.

Facebook Now Gets 8b Video Views Each Day

“We have a chance to build the best place to watch and share video.” – Mark Zuckerberg, **Facebook** CEO, during the company’s quarterly earnings release where he revealed the social media platform attracts 8 billion video views each day from over 1 billion users worldwide.

We’re Watching the Pay TV Bundle Evolve

“What we’re all talking about, including all of your questions, is how to take the obviously successful history of bundles which have very high penetration, not just in the United States but everywhere, and have a significant amount of ad support and how to evolve all of them into more VoD, better guide and interface. I think what you’re seeing now in the evolution of streamlined bundles and new distributors, is more opportunity on a global basis to make all this program production and network branding more engaged and more relevant.” – Jeff Bewkes, **Time Warner** CEO, speaking during the company’s quarterly earnings call.

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