Connolly Network Insight

April/May 2017 Update

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The Big Four - 1Q17 Results

The Big Four continued their success this quarter collectively generating revenues of $121 billion and net income of over $20 billion. Apple grew revenues and net income by mid-single digits, while the other three had strong double digit growth. Apple once again dominated profitability, generating more net income than the other three combined.

The Big Four's collective market cap grew by $330 billion in the quarter, continuing to provide the resource needed to aggressively expand their respective business reach.

Alphabet and Facebook have both announced a shift to deep learning as their basis for language translation, yielding remarkable improvements in performance. The huge efforts these organizations have placed on artificial intelligence and specifically on deep learning will enable even more dramatic differentiation from their competitors going forward.

Company	1Q17 Revenue	Growth Rate (YOY)	!Q17 Net Income	Growth Rate (YOY)	Market Cap
Apple*	$52.9B	5%	$11.0B	4.8%	$754B
Amazon	$35.7B	23%	$0.7B	41%	$423B
Alphabet	$24.8B	22%	$5.4B	29%	$574B
Facebook	$8.0B	49%	3.1B	76%	$411B
*Apple = F2Q17	**$121.4B**		**$20.2B**		**$2.16 Trillion**

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Following are highlights from their earnings calls with emphasis on their plans to enter the Pay-TV space:

Apple

Apple continued it's return to positive growth, with a strong quarter driven by iPhone 7 and 7 Plus sales, as well as strong growth in their services business. All eyes are now on the next iPhone release in the tenth anniversary year of the first iPhone (one trillion dollars ago!)

Apple remains cautious about entering the streaming video space, as they continue growing and learning in the streaming music space, with Apple Music subscribers now at 27 million. One rumor has them buying Disney, if a cash repatriation holiday comes to pass, which would put them squarely in the big leagues for Pay-TV.

Amazon

Amazon had another strong quarter, with revenues up 23% and net income up 49%. For their overall business, the importance of their success in India was highlighted. Financially their long term goal of optimizing free cash flows is their mantra. Their cloud business, AWS, is crucial to their profitability, generating the majority of their operating income.

Amazon continues to expand aggressively on a global basis, both for Prime retail, and Prime Video services. They have strongly embraced the original content model, spending billions to stay competitive. This was highlighted by their three Oscar wins this year. They are also aggressively entering the bidding for sports content, winning exclusive rights this year to Thursday Night NFL Football, which will be streamed to over 200 countries.

Facebook

Facebook had another outstanding quarter with revenue growth of 49% and net income growth of 76%. Mobile ads represented 85% of total ad revenue. Price per ad and number of ad impressions both grew impressively.

Mr. Zuckerberg stated that having focused on connecting friends and families for the past decade, the next focus will be building community. The camera is becoming the primary focus in their apps, as photos and videos replace text. The separate video and newsfeed tabs are seen as continuing long-term, driven by different use cases.

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Video ad revenue at this point is seen by Facebook as complementary to Pay TV ads, rather than as a replacement, but longer term the feeling is that the advertisers will “follow the eyeballs” as social media-based video grows. Facebook are firmly in the revenue sharing ad-based model for longer form content, and hence will not likely pay for content as many of their competitors are doing. They are, however, bidding for sports, with a deal to stream 22 MLS soccer games.

Augmented reality is still seen as a huge opportunity going forward and they have uniquely opened their A/R camera interface to third-party developers to build the market.

Alphabet

Alphabet had another strong quarter with sales growth of 22% and net income growth of 29%. Advertising is still dominating the company's business, with mobile search contributing most growth, followed by YouTube video ads and programmatic ads. The company still does not break out YouTube revenues or profits but highlighted that it is growing at a significant rate. Every day users watch over 1 billion hours on YouTube. During the quarter YouTube TV was launched as an V-MVPD offering as Alphabet continues to try and further monetize its investment in YouTube.

Fiscal constraint continues to be shown with Other Bets generating $244 million of revenue and driving an operating loss of $855 million, down from past quarters in part due to cutbacks in the fiber access program.

CEO Sundar Pichai highlighted that the company continues transitioning to an “AI first “company with Google Assistant leading the way in the short term”. AI is being driven forward across all products and platforms, and Google Assistant is being opened to third party devices.

Sales of hardware was not broken out but rather lumped in Play and Cloud at $3.1 billion for the quarter. The interesting question here is whether the tight coupling between hardware and software, which has been so successful for Apple, will become embraced by Google, at least towards high-end Service offerings. Based on the relatively small hardware sales to date, it’s too early to tell, but could become very significant going forward.

To begin moving toward the pot of gold that is Pay-TV advertising Google introduced bumper ads (six second snackable videos) which can be used with TrueView skippable ads to build brand awareness. In addition Google Preferred allows brands to target the top 5% of content. These forays. coupled with the launch of YouTube TV, will give Alphabet some leverage to start chipping away at Pay-TV ad revenue.

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Pay-TV Update - Storm Clouds Brewing?

Overall trends for the business in the first quarter of this year include an increase in cord cutting, national broadcasters' facilitation of total affiliate deals for SVOD and TVE, and efforts to increase the effectiveness of TV advertising. TV Everywhere is finally enjoying higher awareness and usage but after eight years it is probably too little too late. Per the OTT Video Services Survey, live OTT will exceed broadcast TV in the US by 2022. During the quarter the Broadcast Incentive Auction concluded with a significantly lower than expected dollar amount ($19B) as many broadcasters chose to keep their spectrum. There is also an industry push to deliver a Premium VOD service with earlier release driving higher prices, but so far Disney is not on board, and with their box office dominance, it probably makes this a non-starter.

After two years of slow declines (in the 1% per year range), the first quarter, which is traditionally a strong quarter, dropped by 2.6% for the top seven Pay-TV operators, with 487,000 subscribers lost. The sky is not, however, falling evenly. The satellite based providers, AT&T and Dish, got clobbered, with 77% of the total losses. Comcast actually gained subs, as their "all-in" strategy on video yields results, and the other three MSOs collectively lost only 138K subs. Both AT&T and Dish have V-MVPD offerings ("skinny bundles") which somewhat mitigates their near term loss. For AT&T, migrating their users to a streamed IP service is existential to their long term health, so we need to give them more time to refine the DirecTV Now offering before getting too concerned.

A refinement of the cord cutting premise, namely cutting the data cord as well, bares noting. With the cutthroat competition in the wireless space driving unlimited data plans, and video compression improvements lowering video bandwidth thresholds, a sizable portion of users may choose to forego the UHD/4K/HDR big screen experience in favor of a much lower bill each month. This could not only hurt the video business, but put significant price pressure on MSO data offerings, yielding a double whammy.

Pressure built on the long term prospects for Pay-TV advertising, with Viacom, Time Warner, AMC Networks, and NBCUniversal all seeing single digit declines in ad revenues. ESPN had higher revenues, despite subscriber losses, but higher programming costs led to lower operating income. Turner is reducing the ad load in some programming to bolster value, as is the NFL for it's upcoming season. AT&T are promising fewer but more effective ads in their streamed system (see V-MVPD section below).

Content providers such as Viacom are scrambling to ensure they are included in the V-MVPD offerings (see below), but many of the fringe channels are going to get squeezed out. Some are being pushed to higher tiers by distributors, and some are being dropped. Some channels, such as A&E are abandoning scripted programming. AMC has signed a deal with Charter to produce exclusive programming.

For broadcasters, the FCC has reinstated the UHF discount, easing limits on how many TV stations an entity may own. Sinclair Broadcast quickly moved to buy Tribune Media for $3.9B

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giving them access to New York and Chicago, as well as other major markets. This will give them coverage of 72% of US households, and may fuel a future streaming ambition.

National broadcasters CBS, NBC, ABC and Fox have all put in place clearinghouse frameworks that local affiliates can opt into for SVOD, TV Everywhere, and V-MVPD deals. A lack of this capability was one of the major stumbling blocks which deterred Apple from entering the Pay-TV market last year.

Comcast's strategy of owning the home seems to be paying off for them. They have good revenue growth in their cable unit with a modest increase in video subs, are more than halfway through their X1 upgrade for their 23 million homes, have hit the million customer with their Xfinity Home service, and are licensing their video technology to Shaw and Cox. They did not make a major play in the recent spectrum auction, so their wireless plans are still unfolding, but I strongly believe that in the long run, they must play in this space, and they know it. Altice, meanwhile are getting ready to roll out their internally designed, fiber connected "The Box" this year, having had some success with it in Europe.

So what does all this mean? The Pay-TV operators need to work harder than ever to protect and grow their triple play business. Time pressure will increase on the satellite based players to migrate to streamed IP. The content providers need to ensure their place in the new "skinny bundle" offerings for the future, and there will definitely be fall out of a number of fringe channels that can't find a place in the new video world. Long term I still see Comcast and AT&T (if they can execute in a timely manner) battling it out for consumer supremacy.

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OTT Update - Is It Getting Better?

In 1Q17, for the first time more US households used a streaming service (57%) than owned a DVR (54%). Per the Convergence Research Group, in 2017 US OTT revenue should hit $11.2B (up 35%), vs, $110B (up 2%) for Pay-TV revenues.

Netflix continues to grow, both in the US and Internationally, adding 1.5M and 3.7M subs, respectively, in 1Q17 for a total of 98.5 million subscribers world-wide, generating $2.6B in revenue. They continue to generate a small but positive net income, but are huge free cash flow negative ($2B this year) as they spend up front on content and aggressively grow the business internationally. They publish a Long Term View, and are clear on their focus: “Netflix is a global internet TV network offering movies and TV series commercial-free, with unlimited viewing on any internet-connected screen for an affordable, no-committtment monthly fee.”

For this reason they do not see themselves competing directly with Pay-TV or V-MVPD services, but rather as complementary to them. For direct competition, such as HBO, they compete on the basis of exclusive content, particularly original in-house content. This means their content acquisition/generation costs, at $6B this year, will always dominate their business model. As more SVOD players emerge, particularly Amazon Prime Video on a global basis, the need to spend more on marketing, planned at $1B this year. They also have over $15B in commitments for future streaming rights.

Netflix is executing well on their focussed business model, but it’s not clear to me, as completion grows and content costs climb, how more volume improves their profitability. I personally see them as a great acquisition target, at $64B market cap, for a player with broader ambitions, and the ability to absorb them, like Apple, Facebook or Alphabet.

Amazon is adding live sports to its offering, doing a $50M deal with the NFL for 10 Thursday night games in the upcoming season (Five times last years Twitter rate.)

A new player, bucking the subscription trend in favor of an ad based system, is Tubi TV, who claim the second biggest library premium movie and TV show content behind Netflix and “millions” of users, despite nearly no advertising.

Many content owners are rolling out SVOD offerings, with Time Warner, for example, adding a DC comics offering to its other five services (HBO Now, FilmStruck, Warner Archive, Boomerang, and DramaFever) and promising more to come. CBS seems quite happy with the performance of CBS AllAccess and Showtime, on track to grow to 8 million viewers by 2020, having recently eclipsed the 1.5 million sub mark. NBCU are considering a similar network content launch when the regulatory restrictions for doing so expire in Sept. 2018.

HBO Now has reportedly just gone over the 2 million sub mark. ESPN, although protecting the cable bundle at all costs for its main channel, are readying a series of minor sports for direct streaming to complement the main service for their sports mad base.

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Some channels probably will not find a home, or get lost in a very fragmented direct to consumer streaming world.

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Virtual MVPD - Ramp-Up Begins

The three incumbent V-MVPD ("skinny bundle") players seem to be having moderate success throughout the early months of this year. Sling TV have grown to a reported 1.3 million subs, but this comes at the expense of a growing loss of satellite subs for Dish. MoffettNathanson have calculated a "Lifetime customer value" of a Sling TV sub at $274 vs. an LCV of $1100 for a traditional Dish customer, albeit at lower acquisition costs. Sony's VueTV subs are still relatively small, although they have be using network TV ads to promote the service. DirecTV Now started strongly with 200K subs in the first month, but AT&T haven't been releasing updated sub counts as they continue to work out launch bugs and add functionality.

Two major players, YouTube TV and Hulu's Live service, launched in April and May respectively, bring significantly more competition to this emerging market space.

YouTube TV launched in five major cities, offering over 40 channels, plus optional Showtime, for a no-contract fee of $35 per month. Excluded, at least initially, is programming from Time Warner and Viacom. Three simultaneous streams are supported as well as unlimited DVR.

Hulu are positioning its Live streaming offering as an add-on to its existing ad supported and subscription only service. Fifty channels with two streams and a 50 hour DVR are offered for $40 per month. Unlimited streams and a 200 hour DVR are offered as expensive add-ons ($15/month each or $20/month for both). Hulu's original content is also a big draw.

So how will these two likely play out? Google have had a very spotty track record in Pay-TV and it's Goggle TV FTTH service is stalling out. Having said that, YouTube users a streaming a billion hours of video per day and the service generates billions of dollars of Ad revenue (Alphabet doesn't break out the number but has highlighted YouTube performance for the last several quarters). Expect this service to be well engineered, based on Google experience with video delivery, scale, and discovery. To the extent that this service allows Google to reach into the lucrative Pay-TV ad budget, this can be a big win for them. Expect to see this service well supported and be there for the long run.

Hulu see this play as a logical extension to their existing business and reflects the desires for evolution of content delivery for the broadcasters that own them. They seem to be betting that the unique mix and breadth of the content they bring will let them stand out in consumers eyes. This means they must compete with both Netflix/Amazon and the traditional Pay-TV broadcasters, which might end up being a difficult challenge for them. Time will tell.

A number of other players are rumored to be considering an entry into this market. Comcast is said to be considering an expansion of its limited Stream service, relabelled Xfinity Instant TV to it's entire base of broadband subs later this year. Rights have also been secured for a nationwide rollout, but it's not clear yet if this off-network service would be the best use of

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their resource, vs. focussing on their existing base, where they are uniquely still adding video subs, and investing heavily in sophisticated X1 home gateways.

Verizon are also rumored to be preparing an V-MVPD offering for launch as early as this summer. Their strategy to date of taking on Google and Facebook for programmatic digital ad share, using go90 as it's streaming offering for millennials, has proven to be very difficult, and it's Fios offering is not growing. It's not clear to me how jumping into the "skinny bundle" space supports their main digital ad push.

Canadian telcos are retooling their offerings, with SaskTel and Telus using Ericsson's cloud-based MediaFirst offering as a basis for an enhanced IPTV offering. This system grow out of the original Microsoft MediaRoom, used by AT&T for U-Verse.

Apple and Amazon are often cited as potential entrants to the V-MVPD space as well. Apple's caution to date speaks volumes, in my opinion, on the overall attractiveness of the current space, although the need to be in this game in the long run is essential to any consumer network player.

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