Connolly Network Insight

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Messaging - The Next Big Battleground

A battle is currently shaping up among the global networking giants for dominance of the smart phone messaging space. To see how this has come about, let's look at a brief history of this service. Prior to the advent of smart phones, text messaging (think Nokia flip phones) had become a very lucrative service for telephone carriers around the world. Then in 2010, Apple introduced an instant messaging service for its iPhone, called iMessage, effectively dooming the SMS-based telco messaging. Apple's service was free between iOS users and reverted to an SMS text message for non-Apple recipients, which it still does today. Facebook introduced an instant messaging service as well and wisely spun it off to be a separate app called Messenger. Now there are over 1.6 billion daily messaging users worldwide. SMS-based messages for telcos are basically flat to declining at about 6 trillion messages per year. Last year app-based messaging generated 34 trillion messages and this is expected to grow to 63 trillion by 2020.

In typical “big networking” fashion, these services were offered for free as the user base was aggressively grown. WhatsApp and Messenger, both owned by Facebook, have over 1 billion users each. WhatsApp, acquired for an astounding $19B, is very much a global play with less than 20 million of its billion users based in the US. WeChat, owned by Tencent in China, has 800 million users, and other regional services such as Line and Telegram are growing aggressively.

The second phase of this offering is the monetization phase (see below “Monetization - The Other Shoe”), where revenues are generated in some fashion from the huge user base. Companies like Line in Japan have begun selling “stickers” using a freemium model to generate significant revenue. The most interesting innovation, however, comes surprisingly from China and the WeChat service. Chinese WeChat users do much more than messaging each other on this service. It has become a principal way to access a wide range of services such as shopping, ordering tickets, ordering transportation, and many other commercial services. The business model here is primarily a cut taken by WeChat from the business entity communicating with the users. There are over 10 million such entities on the system today. A big reason for the success of this model is that for most Chinese people the smart phone has been their only experience in Internet access. This raises the question of the viability of this type of offering in more lucrative western nations. Although there are many skeptics, I see two reasons why this model can potentially play out here in the US. The first is that the highly sought out millennial market is similar to that of China in that most millennials use their cell phone as their primary Internet access method. Secondly, and potentially more significantly, the huge push by the Big Four networking companies in deep learning-based artificial intelligence plays directly into the sophistication, and hence value, of the user interaction. Since April 2016, for example, Facebook’s Messenger has added 30,000 “Chatbots” to interact with users and can now do payments in-app. These Chatbots will allow users to conduct internet search, e-commerce, advertising, and content delivery. Google, who have been on the sidelines in the messaging market, are aggressively entering with a service called Allo and are touting their lead in AI-based conversational communication to assert their unique value. It should be noted there is also a big push for messaging apps in a business setting (with offerings from Microsoft, Facebook and Slack) but this is outside the focus of my consumer based research.

So the name of the game here is to keep users on their messaging app as they go about their day and hence keep the revenue stream, whether from advertising or more likely transactional fees, flowing into the owner of the app. Profits from this space will be more fuel for the Big Four to continue to disrupt other areas such as Pay-TV.

Monetization - The Other Shoe

The business model leading to the hyper success of the Big Four, with a collective market cap of $1.7 trillion, is unique in all of business history. There are four ways these networking-based organizations drive revenues, namely subscription, transactional, advertising, and freemium. Amazon and Apple have been primarily transactional organizations selling goods, software, media, and services. Both have been growing their subscription business aggressively to complement their transactional success. Their music offerings, for example, have both expanded from music sales to music sales plus subscriptions. Facebook and Google have almost entirely relied on an advertising model where they dominate the worldwide market for digital advertising. The fourth method of revenue generation is the so-called freemium model in which most users enjoy services on a free basis and a few ardent users purchase premium capability for the service, hence generating revenue. Examples of this model include Skype and mobile video games, such as Candy Crush, where a small percentage of users generate 100% of the revenue.

All of the Big Four have, in a sense, been operating the freemium model on a corporate-wide basis in that they all include a number of services for their customer base which have not to-date been revenue generating. This is now about to change as all of these companies begin to mine their installed base for revenues. What is unique to the Big Four is that their subscriber base is measured in billions rather than millions and this gives them unprecedented leverage to launch sizable new businesses. This year, for example, Apple's service business would be a Fortune 100 company on a standalone basis. Apple have shown a consistent excellence in monetizing their subscriber base. In 2015 Apple downloaded 23.4 billion apps vs. 96.3 billion downloads for Google, yet Apple generated $19.8 billion on their apps vs. Google’s $11.6 billion.

So what are the services which will become revenue multipliers for the Big Four?

Facebook has four "billion+ user" services, namely Facebook, WhatsApp, Groups, and Messenger, and also has 500 million Instagram users. As Facebook grew it's basic social networking capability, originally as a website and then more predominately as an app, it initially generated no revenue. Adding advertising, particularly during the shift to mobile access, has grown the company to have the sixth biggest market cap on earth. WhatsApp, purchased by Facebook for $19 billion; Messenger, wisely spun off from Facebook as a separate app; and Instagram, purchased for $1 billion, are now prime to add new revenue streams.

Google has seven "billion+ user" services, namely Search, Maps, YouTube, Android, Play Store, Gmail, and Chrome. Revenue has come predominately from advertising in Search and YouTube and a smaller piece of transactional revenue from Play Store. Expect Maps and Gmail to carry advertising in the coming months.

Amazon is expanding its Amazon Video subscription service worldwide to compete with Netflix, and Apple has launched an App Store specifically for iMessage.

Smaller companies, without the leverage of huge user size, are having a more difficult time executing this play. Twitter, for example, is struggling to grow either users or revenue per user and have a very uncertain future with a number of potential buyers recently taking a pass. Snap on the other hand, with a smaller base of users but a good lock on millennials and video, is still generating a lot of buzz for an upcoming IPO with high multiples driving a $25 billion potential market cap.

This newly emerging market for live video, being attacked by Snap, Facebook, Google and Twitter, needs close attention because of its potential to address a piece of the $80 billion pay-TV advertising revenue over the medium-to-long term.

Pay-TV - 3Q16 Update

The pay-TV market in 2015 in the US generated $166 billion, split between $80 billion of advertiser spending and $86 billion of end-user subscription fees. Once final 2016 numbers are available, my guess is that they will be moderately higher. The fundamental questions regarding this market are therefore what will be the degree of cord cutting/cord shaving and the level of advertising spending.

Looking first at cord cutting, there are some differences between the various analysts reports on subscriber counts for pay-TV operators. The most complete view comes from Leichtman Research Group who analyse the top 11 pay-TV operators representing 95% of the market or 93.7 million subs. They report a net loss by these firms of 255,000 subscribers versus a loss of 210,000 in 3Q15. Over the past twelve months they calculate a net subscriber loss of 755,000 versus 445,000 for the previous twelve months. This loss is 0.8% per year, hardly the "sky is falling" predictions of many analysts.

Breaking down the numbers, the top six cable operators, representing 52% of the base, lost 90,000 subs versus 170,000 in 3Q15. The two satellite-based operators, DirecTV and Dish (including Sling TV) representing 37% of the market, gained 205,000 subs versus a gain of 3000 subs in 3Q15. Finally, the telco providers representing 11% of the market lost 375,000 subs versus a loss of 45,000 subs in 3Q15.

Looking beneath these numbers, AT&T have stopped promoting U-verse as they aggressively promote DirecTV with quad-play discounts, and as a result have had a net wash with U-verse subs down and DirecTV subs up. Dish have been aggressively promoting Sling TV but have been unable to offset subscriber losses on their satellite platform with a net loss of 116,000 subs. In the cable segment Comcast, with their aggressive promotion of Xfinity especially on their advanced Xfinity X1 gateway, actually gained 32,000 subs while all the other operators continue to lose video subs as they shift their emphasis to Broadband as their principal offering.

So far, the most successful over-the-top offerings, primarily Netflix, Hulu, and Amazon Prime Video, have been more complementary services and have not fundamentally threatened the pay-TV offering.

A "skinny bundle" V-MVPD, or indeed a fatter bundle offering, could pose a more significant threat. Sling TV and Sony's Vue system have been, at best, niche offerings. The more disruptive offerings are DirecTV Now, the upcoming Hulu service, and Google's 1Q17 “Unplugged” offering. A fundamental advantage of these systems in the long term is that they operate on a pure IP basis. AT&T, knowing that both their U-verse and satellite offerings need to migrate to survive, may well be the driver of this new model. The MSOs, however, own the most powerful IP pipe into the home and hence, at least for TV based offerings, are really in the driver seat controlling the pace of migration to pure IP-based offerings.

I, therefore, believe that for the segment of the population continuing to enjoy TV-based services in their home, Comcast and AT&T are in a good position to defend their dominance of the pay-TV space. The most interesting question in my mind, therefore becomes how skinny the bundles will become as the industry sheds the fat of fringe offerings previously clinging to their more valuable "cousins." These fringe offerings will either find a home in the pure OTT space or shut down.

Looking at cord shaving, it's more difficult to get an industrywide handle. Comcast reported 4.5% growth in video revenues on an essentially flat subscriber base, so overall video revenue per sub is up, not down, but price increases are still common in this market. They also reported programming costs have increased by 11.4% in the quarter. Revenues for the quarter are up 4.3% at HBO, one of the primary cord shaving targets. This has been attributed by Time Warner Inc to higher domestic pricing and international growth, so it's inconclusive on US subscriber counts.

For advertising, those firms that break it out are mostly reporting modest gains in revenues. Turner, for example, is showing a 2% increase in ad revenues for the quarter. With digital advertising still growing at a double-digit pace, it is due to overtake TV ads this year. As the primary drivers of the digital ad space such as Facebook and Google continue to look for growth opportunities, they will turn their sites squarely on the Pay-TV ad market.

The Pay-TV industry has not, to date, done a good job at building defenses to protect this advertising space. Despite having addressable set top boxes broadly deployed for years now, the total level of addressable TV advertising revenue within the industry is only predicted to be $2.2 billion next year despite coverage of 74% of US homes (per the Video Advertising Bureau). In a similar vein, TV Everywhere, the industries' attempt at bringing content (and with it advertising) to mobile devices, has been for the most part a failure. Aside from cumbersome authentication, arm's-length complexity with content owners has resulted in a system too confusing for most consumers. In fact, this is one reason cited by AT&T for the value to the public of their proposed Time Warner acquisition - the ability to innovate on addressable advertising and personal services via tight coupling of content and distribution. AT&T have recently announced, along with ad giant WPP, the intent to acquire Invidi, one of the pioneers of addressable advertising technology.

OTT - 3Q16 Update

There are five different areas of activity to examine in the OTT market impacting not only this space directly but also the overall pay-TV market. These areas are: increased focus by Amazon, ramp up of Pay-TV channel offerings, continued growth of niche offerings, launch and pending launch of virtual MVPD offerings, and, finally, live streaming capability within social networks.

Amazon, who have been in the streaming video space for some time, have two significant new areas of focus. In December, they launched Amazon Prime Video in 242 countries around the world matching Netflix' global aspirations head on. In the eight countries supporting Amazon Prime, the service is free for Prime users. For other countries, the service is aggressively priced at $2.99 per month. Secondly, Amazon have been holding talks with all of the major sports leagues as well as a number of second-tier sports organizations with the intent of launching a “Live Sports tier" as part of Amazon Prime Video. It's not clear whether this would be priced separately or provided as value add to their roughly 60 million Amazon Prime customers. With live sports being one of the principal glues holding cable bundles together, this becomes a potentially serious threat to the established order.

Content providers, whether broadcasters or pay TV channels or sports league owners, are ramping up their efforts to exploit the over-the-top market channel. Starz, for example, launched a direct-to-consumer service last April and became part of the partner program with Amazon Prime Video. Using these two channels, they are now are approaching 1 million subs. CBS, the only broadcaster to pass on Hulu ownership, has been promoting its CBS All Access product and now plans to bundle it with Showtime OTT. In addition, content exclusivity is being used to add value to this offering with the new Star Trek series and the Good Wife spin-off only available on CBS All Access. CBS All Access now has over one million subs. Turner has re-organized its management team to put more emphasis on its direct-to-consumer offerings on a global basis. They have had a delay in launching their first offering, FilmStruck, which is focussed on classic and art-house movies via partnership with The Criterion Collection, but are now up and running. Finally, HBO, having partnered with BAM Tech to roll out its OTT offerings, reportedly wants out of the contract post Disney investment in BAM Tech. HBO are rumored to be launching its own TV streaming option in 2017. HBO Now has also gone over the one million sub mark.

A number of new niche offerings have launched or been announced in the quarter. Brown Sugar, catering to an African American audience, has launched and, Vudu, owned by Walmart, is rolling out an ad-supported movie channel, building on its movie rental, sales, and DVD conversion business. LeEco, the "Netflix of China,” are planning a streaming service in the US by early 2017 for their smart phones and TVs, offering programming from MGM, Lionsgate, Vice and Showtime. Finally, Liberty Media are considering a Formula One racing SVOD service.

AT&T launched its virtual MVPD service, DirecTV Now, in December and similar launches are planned by Hulu and Google in early 2017. These are potentially much more disruptive to the established Pay-TV space and I will cover them separately below.

The last area of focus in the OTT space for the quarter is really a tangential one, but possibly very significant in the long run. This is the live streaming capability of the social networks. Facebook has been ramping up its live streaming capability with a major push toward its 1.8 billion users. So far, there is no advertising revenue split being offered and, in fact, a number of celebrities are being paid significant sums to provide content. Complementary to this is the live streaming of political events such as presidential debates. This is being done to directly address the threat of Snapchat which is already starting to pull some sizable brand-based advertising revenues onto its platform. Facebook have now upped the ante by rolling out Instagram Live as part of its Stories offering used by 100 million people on a regular basis. Over time, these kind of offerings can become a sizable distribution channel for professional programming and can also siphon off a significant chunk of the traditional pay-TV advertising. It's not a near term threat but given the enormous user base and resources of these network based companies, these offerings bear close scrutiny.

V-MVPD - AT&T Leading the Charge

AT&T launched their DirecTV Now streaming service at the end of November. Its stated target market is the 20 million or so cord cutters/shavers/nevers that might subscribe to a live TV video entertainment offering. It was rumored to launch with 100 channels or so, at $35 per month, consistent with the AT&T CEOs promise of “aggressive pricing.” At launch, however AT&T delivered a more conventional approach offering an initial discount of its $60 per month 100+ channels service down to $35 per month for a limited time.

So what do AT&T have in the offering and what is missing?

They are offering four different tiers:

Live a Little - $35 per month for 60+ channels (with no sports networks)
Just Right - $50 per month for 80+ channels
Go Big - $60 per month for 100+ channels
Gotta Have It - $70 per month for 120+ channels

Two concurrent streams are offered and an extensive on-demand library is available.

So what's missing?

CBS and its associated channels are not in the initial offering. Local channels from other broadcast networks are only available on broadcaster-owned affiliates (at least initially). No network DVR is available, and DirecTV NFL Sunday Package is not available on mobile devices due to Verizon exclusivity for this capability.

Clearly, these initial limitations will be addressed over time. In addition, AT&T sees an opportunity to deliver a uniquely effective, addressable advertising offering which the Pay-TV industry has so far failed to do. Finally, in the longer-term, this will become their only offering displacing the older technologies currently used for U-verse and DirecTV subscribers.

This is a relatively new market with two weaker existing competitors and two new major competitors coming on board in 2017. The two existing competitors, Sling TV and Sony's Vue system, have not, to date, made a major market impact. Sling are beta testing cloud DVR and have been adding sports content such as NBA TV but have less than 1 million subs to date and Vue has captured a much lower number of subs.

The two competitors preparing to enter are Hulu and Google, both of which are rumored to be launching some time in early-to-mid 2017.

Hulu are looking to complement their existing OTT service with a virtual MVPD offering and have been busily signing content owners. They do not yet have a deal with CBS and are reportedly looking at a $35 per month price point.

Google has been somewhat unsuccessfully trying to enter the Pay-TV space for a number of years now. Of course, their YouTube video offering generates significant advertising revenues and they have recently added a subscription-based offering, YouTube Red, but these two offerings do not include traditional Pay-TV content.

Google is looking to launch a service called Unplugged to compete in the virtual MVPD space. They have recently announced a deal with CBS and are in advanced talks with the other three major broadcast networks as well as a number of other content channels.

The last point in competitive terms is who is NOT entering the space, namely Apple. Apple had been rumored to roll out a service last year and apparently got bogged down in content negotiations. Apple does not typically enter a market where it cannot see near-term profitability and significant market share, and perhaps this bodes ill on the overall potential attractiveness of the V-MVPD space. They are still rumored to be looking very strongly at generating their own content, and, in the short run, have rolled out a “TV app” which offers their billion iOS users the opportunity to sign up for a range of Video offerings and manage them holistically (with a 15% subscription cut for Apple).

In summary, I believe the overall success and pace of growth of this space is very much in AT&T’s hands, at least for now. They have the networking and wireless clout, the size and scope, and a respectable advertising knowledge all essential to success. A Time Warner, Inc. acquisition would give AT&T the content knowledge and ability to innovate on personalization. Finally, with long term limitations of their acquired satellite technology and a need to show continued leadership in wireless, AT&T have two huge defensive reasons to go on the offense with video.