Growth Opportunities for the [Streaming TV Ad Sales] Business

Confidential Strategy Memo

Prepared for [Streaming TV Platform] by Ben Biddle January 2018

Introduction

After a successful IPO, investors are watching closely to see if [Streaming TV Platform] can maintain the momentum in its ad platform business and justify its current valuation and forward price to earnings ratio. Short sellers have already started circling, and support for pioneering new product lines, such as the [Streaming TV Platform] Entertainment Assistant, may wane if the company delays too long in reaching profitability. [Streaming TV Platform] must find a way to continue growing platform revenues while keeping costs under control.

There are essentially four ways to grow revenues in any business: 1) sell more of the same to existing customers, 2) find new customers for the current product set, 3) introduce new products to better serve current customers, or 4) launch entirely new business lines with new products targeting new markets and customer segments.



Three of those four growth strategies are already reflected in the evolution of [Streaming TV Platform]'s business model so far, and the fourth - an entirely new business line for monetizing [Streaming TV Platform]'s audience and device data - could be next. This memo considers the growth potential and risks associated with each strategy going forward, provides a framework for prioritizing initiatives, and recommends actionable next steps for [Streaming TV Platform] to press its data advantage in TV streaming.

Quadrants 1 and 2: Growing Sales of Current Products

Starting out in 2008, [Streaming TV Platform]'s customers were the TV viewers buying its devices and the streaming services populating those devices with content (first Netflix, then others). Later, [Streaming TV Platform] introduced advertising and marketing services to help those streaming services grow their respective audiences, and around 2014, [Streaming TV Platform] began offering those services to brands and other advertisers on the [Streaming TV Platform] ad platform.

[Streaming TV Platform] had to first grow its user base (i.e. attract TV viewers) before it could come up with a compelling value proposition for its ad platform business. Starting with streaming services made the most sense because simply owning a [Streaming TV Platform] device qualified users as in-market for streaming services. From the perspective of a streaming service providers, [Streaming TV Platform] offered a customer acquisition channel with high quality leads.

For other advertisers, [Streaming TV Platform] had to grow its user base still larger to deliver the desired reach. Today, increasing that user base remains the surest way for [Streaming TV Platform] to grow revenues in its ad platform business.

Market adoption of streaming TV is still in a rapid growth phase,¹ with \$70 billion of traditional TV ad spending up for grabs in the US alone. Those advertising dollars are going to follow the TV viewers as they move to new digital video platforms, and by focusing relentlessly on its user experience, [Streaming TV Platform] will continue to win the competition for households among streaming device manufacturers and smart TV OS providers.²

Key audience metrics to watch are the number of weekly active users, the weekly average number of sessions per user and

(Connectable TVs, Blu-ray Disc Players, Game Consoles, & Streaming Media Players) 73% of connectable '16 (A) 180 devices get connected '17(F) 200 '18 (F) 222 '19 (F) 242 81% '20 (F) 260 50 100 150 200 250 300 350 ■ Total # of Connected Devices ■ Total # Capable But Not Connected Base: U.S. Internet households Source: The NPD Group/Connected Intelligence, TV-Connected Device Forecast

includes a small percent of game consoles that are non-connectable

Internet Connectable Device Forecast

the average viewing time per session - all of which enhance [Streaming TV Platform]'s value proposition to advertisers. As [Streaming TV Platform]'s value proposition strengthens, the company will be able to set higher ad prices, close larger deals, and negotiate for better revenue/inventory splits with the channels also advertising on the platform.

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¹ http://www.nielsen.com/us/en/insights/news/2017/tv-connected-devices-pave-the-way-for-new-ways-to-watch-content.html

² Expanding into smart TV software is an example of growth strategy 2, selling an existing products to new customers (in this case, a version of the software powering its devices to TV OEMs).

Increased spending among current advertisers will also contribute to a virtuous cycle of social proof attracting new advertisers to the platform. [Streaming TV Platform] will have more evidence to convince advertisers who were skeptical at first, and the fear of missing out will eventually set in among those who were too risk averse. As [Streaming TV Platform]'s penetration increases among current customer segments, sales teams will be able to sell into new ones to keep pipelines full.

In addition to demand, the size of [Streaming TV Platform]'s user base also influence its supply of ad inventory. The more people consume content on the [Streaming TV Platform] platform, the more impressions [Streaming TV Platform] will be able to deliver for advertisers. Increasing supply with inventory splits alone (as mentioned above) will quickly reach an upper limit and could strain business relationships if pursued too aggressively, and it will take several quarters (if not years) for platform expansion initiatives, such as the recently announced [Streaming TV Platform] Connect licensing program, to contribute to ad inventory.

Alternatively, [Streaming TV Platform] could rapidly increase both advertising supply and demand by expanding internationally, but as the recent legal challenge to device sales in Mexico indicates, that may be easier said than done. Assuming [Streaming TV Platform] identifies foreign markets with favorable media consumption habits and sufficient broadband access, [Streaming TV Platform] still needs localized content to drive consumer demand for its devices and software.

Netflix's expansion into over 130 countries suggests the time may soon be right for [Streaming TV Platform] to make its own international push. For at least the next few quarters, however, [Streaming TV Platform] should rely instead on the pull from smart TV manufacturers to establish footholds in foreign markets. Chinese manufacturers in particular have had great success leveraging the [Streaming TV Platform] brand to drive sales in export markets.³ Continuing to aggressively promote the [Streaming TV Platform] brand and [Streaming TV Platform] software with entertainment OEMs will be the best way to prepare for an eventual international expansion in the near term without taking attention and resources away from growth in the US and Canada.

With audience metrics trending in the right direction, the remaining challenges for [Streaming TV Platform] to grow revenues in its current ad platform business are primarily Sales and Marketing in nature. [Streaming TV Platform] should focus its sales strategy on quantifying ad performance on the [Streaming TV Platform] platform, especially the return on ad spending (ROAS), and telling that story to agencies and prospective advertisers. Hold off on programmatic, and stay the course with direct ad sales.

[Streaming TV Platform] should also back away from offering the kinds of pricing discounts that are often extended to alpha and beta customers. Margins before R&D but after Sales and Marketing expenses should be increasing over time (however gradually) as pricing improves. In particular, if SG&A⁴ for the ad platform as a percent of total sales is not trending downward, it could signal poor product-market fit (i.e. an overreliance on marketing and promotions to drive sales) or insufficient focus

³ http://news.ihsmarkit.com/press-release/technology/smart-tv-surge-more-half-tvs-shipped-globally-q1-2016-were-smart-ihs-says

⁴ The line item for Selling, General and Administrative expenses in the company's income statement

slowing progress along the business's learning curve. SG&A should start out high, as the company educates the market on its offering, and then come down once adoption crosses the chasm.⁵

Quadrant 3: New Product Launches

Once [Streaming TV Platform] feels reasonably confident in the growth plans for its current product set, it should next gauge demand for new products by engaging its current customers. Looking into the other marketing related needs of its current customers is presumably how [Streaming TV Platform] came up with the idea to facilitate targeting for third party ad sellers. [Streaming TV Platform] was already helping streaming services grow their audiences and, in some cases, to monetize those audiences by selling ad inventory on their behalf. Allowing channels with their own sales teams to also benefit from using [Streaming TV Platform]'s first party data seems like a logical next step.

Care must be taken, however, not to devalue [Streaming TV Platform]'s ad inventory in the process. [Streaming TV Platform] can charge a premium for advertising on its platform because of its high-value, deterministic audience data. If advertisers realize they can reliably target the same [Streaming TV Platform] audiences by purchasing ads from one of the streaming services instead, sales of audience data (at a much lower price point) may start to cannibalize ad sales.

[Streaming TV Platform] can guard against third party ad sellers taking ad sales away from [Streaming TV Platform] in two ways. The first is to limit access to audience data by withhold some portion (leaving some audiences exclusively available through [Streaming TV Platform] ads), capping the volume of [Streaming TV Platform] facilitated impressions, or restricting sales to a pre-approved whitelist of third party ad sellers. Of course, limited access necessarily means more limited upside too.

The second - and preferred option - is to price the benefit of [Streaming TV Platform]'s data high enough to capture its full value. Third party ad sellers will still be able to grow sales volumes and total revenues by tapping into incremental demand for targeted ads but at a CPM (after passing the data cost through to the buyer) that protects the price competitiveness of [Streaming TV Platform]'s own ad inventory.

Information Value

How to price [Streaming TV Platform]'s audience data for targeting touches on a very important concept in any data business: information value. Information value is the difference in outcomes with and without the benefit of some information. In other words, how much does the net expected value of a decision change with new information influencing that decision? In a decision tree, the net expected value is the sum of probability weighted outcomes, both bad and good. Since the possible outcomes themselves should not change based on new information, the real driver of information value is the change in probabilities. (*continued next page*)

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⁵ From Geoffrey Moore's book, *Crossing the Chasm*, the chasm is what separates innovators and early adopters from the rest of the market; crossing the chasm means to drive adoption with the next tranche of customers - the so-called early majority.

(Information Value continued)

In ad targeting, the probability of reaching a receptive audience as intended changes in the presence of reliable information about that audience (e.g. deterministic household data). The information value of audience data is implied by the differences in prices between ads that use the data and the same ads targeted with the next best alternative (e.g. IP address and census data). Precisely estimating changes in probability may not always be possible, nor will there always be an active market to rely on for price discovery, but nonetheless, the better [Streaming TV Platform] gets at estimating the information value of its data, the better it will be able to manage its data business lines.⁶

Additionally, [Streaming TV Platform] can differentiate its ad inventory using audience segmentation. The ability to aggregate audiences across channels and offer advertisers greater scale on its platform is one of [Streaming TV Platform]'s competitive advantages. [Streaming TV Platform] should construct audiences for third party ad sellers with that advantage in mind, focusing on more precise targeting within channels rather than targeting audiences that span across channels. For example, Fox might sell ad units targeting sports enthusiasts in certain age ranges and serve those ads on the Fox Sports channel using [Streaming TV Platform]'s demographics data, but if [Streaming TV Platform] offered its own sports enthusiasts audience, Fox could use that to serve ads on the Fox News channel as well. In short, interest based audiences that correlate with specific [Streaming TV Platform] channels may erode [Streaming TV Platform]'s cross-channel advantage.

Targeting ads is an example of what Clayton Christensen refers to as a customer job-to-be-done,⁷ and [Streaming TV Platform] identified better data on audiences as a functional requirement of that job, something which [Streaming TV Platform] has a unique advantage in providing. [Streaming TV Platform] should continue exploring other customer jobs and their associated functional as well as social and emotional requirements to identify others which might be a good fit with [Streaming TV Platform]'s strategic assets and capabilities.

Another job worth looking into is measuring conversions. Measurement is already important to telling [Streaming TV Platform]'s ROAS story, and in the case of streaming service subscriptions and other video transactions, [Streaming TV Platform] already measures on-platform conversions. If [Streaming TV Platform] could find a way to enable other types of conversions to take place on its platform or to capture data on conversions that take place off its platform, it would help to both grow ad sales (by telling a more compelling story and attracting more direct response advertisers) and expand [Streaming TV Platform]'s portfolio of revenue generating products and services.

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⁶ For the purposes herein, data is defined as any information stored in a digital format. Information, in turn, is anything that reduces our uncertainty about the surrounding world and makes it possible to either describe and/or make predictions about that world.

⁷ Clayton Christensen developed the idea of customer jobs-to-be-done in detail in his book *Competing Against Luck*. Customer jobs also play a prominent role in Strategyn's <u>outcome driven innovation</u> methodology, and Alexander Osterwalder incorporated the concept into his popular <u>value proposition canvas</u>.

Focusing on the jobs of current customers rather than those of new customer segments tends to lead to better outcomes for a number of reasons, not least of which is strengthening existing customer relationships and increasing the stickiness of the current product set. Talking directly to customers also provides more reliable information on potential demand, and the process of actually finding customer segments for a new product idea - what Steve Blank refers to as customer development in his book *Four Steps to Epiphany*- adds to the overall level of effort to launch a new product .

Total effort matters because any new product launch has the potential to take attention and resources away from selling the products already in the market. By focusing new product development on existing customers first, [Streaming TV Platform] can maintain its strategic focus and keep costs under control with greater economies of scope.

Another way to keep development costs down is to establish strategic partnerships. Strategic partners contribute to what Geoffrey Moore calls the "whole offering" - the collection of complementary products and services that together give customers a compelling reason to buy. In the jobs-to-be-done framework, strategic partners help customers to accomplish all the smaller jobs that contribute, together with [Streaming TV Platform]'s offerings, to a larger job well done.

Interrelated jobs are analogous to the relationship between a general contractor and the various subcontractors building a house together; a consumer will hire a general contractor to build the house, and that general contractor will then bring in various subcontractors to install plumbing and electrical wiring, for example. All contribute to building the house, each in a distinct way.

Partnering with other platforms to offer remarketing and audience extension to [Streaming TV Platform] advertisers is an example of one such strategic partnership. Marketers are trying to drive incremental sales by reaching audiences in the moments which and on the platforms where those consumers will be most receptive to their messages. [Streaming TV Platform] helps to accomplish part of that job by delivering relevant ads to highly engaged TV viewers; a General Motors ad on the [Streaming TV Platform] platform, for instance, might raise consumer awareness of the brand, but to maximize sales lift, GM will also want to target those same TV viewers with a direct response ad elsewhere when they are actually in-market for a new car.

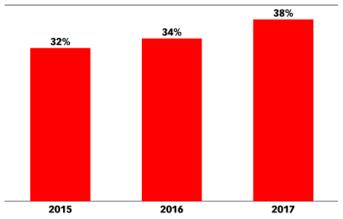
Historically, advertisers have tended to rely on TV more for branding (the so-called upper funnel); TV has not always been as effective for direct response further down in the funnel. Connected TVs have

the potential to change that though. By partnering with other digital platforms, [Streaming TV Platform] could help marketers to reach the same TV viewers at more points further along the customer journey.

Partnering with other digital platforms could also help with audience sizes, which remains one of the primary bottlenecks to moving more TV ad dollars over to digital. The digital video landscape is highly fragmented, spreading audiences out across various platforms. Removing the sources

Share of Ad Budget Spent on Cross-Platform TV/Video Buys* According to US Agency and Marketing Professionals, 2015-2017

% of total



Note: *TV and digital video from the same programmer or TV network Source: Interactive Advertising Bureau (IAB) "Digital Content NewFronts: Video Ad Spend Study" conducted by Advertiser Perceptions, May 1, 2017 of friction in cross-platform video advertising will surely grow the market, and if [Streaming TV Platform] can play an active role in providing those kinds of solutions, it stands to capture a disproportionate share of that market growth.

Before setting up a partnership, it is important to consider the degree to which the other platform actually competes with [Streaming TV Platform], both in terms of audience attention as well as how the company makes money. Most partners will be a little of both. [Streaming TV Platform] should look for partners with minimal overlap in how they make money and avoid entering into partnerships that could create an open-ended dependency on just one partner.

Audience Matching

One particular way in which [Streaming TV Platform] will need to protect itself against potential encroachment from strategic partners is in how audience matching is handled. [Streaming TV Platform]'s audience data is valuable because it is deterministic, but companies have gotten increasingly better at identifying consumers probabilistically using a variety of digital signals (sometimes referred to as fingerprinting). Even just identifying the [Streaming TV Platform] households in another platform's audience data comes with the risk of that data being used to identify [Streaming TV Platform] households elsewhere online without [Streaming TV Platform]'s knowledge or consent.

To minimize that risk, [Streaming TV Platform] should be selective in matching audiences externally and turn to neutral third parties (with strong contractual restrictions) to mask any potentially identifying information (for people, places and devices). Ideally both parties would pass only enough data to match their internal IDs to universal IDs managed by the intermediary, and the universal IDs would be used for cross-platform targeting and measurement. Data onboarding companies, such as Acxiom Liveramp and Neustar, have started offering such matching services, but these companies remain susceptible to conflicts of interests. The ultimate solution may still have to come from a industry group such as the IAB.

Competitive risk is not the only or even the most important consideration when setting up a new partnership involving audience data. Data sharing also comes with reputational risk, regulatory risk, and security concerns all associated with issues of consumer privacy, and [Streaming TV Platform]'s business future depends on the trust of consumers and advertisers alike. Other countries may soon follow the lead of the European Union which recently enacted the General Data Protection Regulation (GDPR). [Streaming TV Platform] will need a robust system of governance and information security policies in place to remain conformant and deal with any potential breaches or other unauthorized uses of its data.

Quadrant 4: New Business Lines

What about uses of [Streaming TV Platform]'s data that fall outside of marketing and advertising? Data has been called the new oil of the information age, and [Streaming TV Platform] sits atop a large and growing reserve of data. Building a new business out of that data will depend on [Streaming TV

Platform]'s ability to extract, refine, and distribute it to companies that stand to benefit the most from using it in their applications and workflows.

For reasons already covered here, building a new business line (e.g. new products for new markets and/or new customer segments) is the riskiest of the four growth strategies, but the rewards can often be worth it. Growth from the other 3 quadrants tends to become linear over time as the business matures; the allure of a new business line is a return to the exponential growth of earlier periods.

The key to launching a new business is to start small and stay small until the risks and uncertainty diminish. Some companies set up incubators for new businesses; others outsource the early experimentation completely by investing in start-ups and growing through acquisition instead. In either case, the goal should be learning before making money, using proofs of concept and pilot programs for alpha customers to test and iterate on hypotheses. Only put Sales and Marketing resources behind growing a new business after confirming the right product-market fit exists to scale profitably.

The most valuable applications of [Streaming TV Platform]'s data may not be the most obvious so [Streaming TV Platform] needs to consider opportunity costs carefully before committing too much to any one opportunity. The fastest way to monetize [Streaming TV Platform]'s data would probably be selling it through a data market, such as the ones operated by Oracle and Microsoft, or to one of the TV measurement firms directly, such as Nielsen, comScore or Kantar. Because those companies are all resellers, [Streaming TV Platform] stands to capture more of the value from its data and to gain more insights into the end users (and their jobs-to-be-done) by cutting out such intermediaries.

Service Oriented Architecture

Data businesses usually require substantial investments in ETL⁸ infrastructure for turning raw data into high-quality, easy-to-use-and-interpret data sets. [Streaming TV Platform] can accelerate the time-to-value once it is ready to scale a new business line by investing today in a service oriented architecture that exposes its data and analytics to internal clients via APIs.

Although the exact same APIs may not ultimately be used for both internal and external clients, [Streaming TV Platform] will gain valuable experience with data-as-a-service (DaaS) that does transfer over - developing and integrating different types of data, operating messaging systems and data pipelines, and monitoring data flows and endpoints - not to mention governance and information security.

[Streaming TV Platform] will also need high quality metadata and data dictionaries to support any new data business. For internal clients, companies all too often rely only on the tacit or tribal knowledge of employees for interpreting data sets, rather than codifying that knowledge in data dictionaries and metadata repositories. Over time, this becomes another form of tech debt as employees change jobs and lose track of what's stored in which places, an untenable situation for marketing data to external customers.

⁸ Extract, transform, and load

Selling data directly would also give [Streaming TV Platform] better control over how its data is ultimately used, which could be critical to protecting its flanks from new sources of competition. Fourthwall, Tru Optik, iSpot.tv, Mobitv and Conviva are all building businesses around TV data, and as recently as November of last year, Samba TV announced a partnership with Centro to compete directly with [Streaming TV Platform]'s ad platform.

As a direct competitor, Samba TV also provides clues to innovative new software features that might help [Streaming TV Platform] increase the value of its data assets. Samba TV promises consumers better search, discover and personalization *across* (not just within) streaming services. With Disney preparing the launch of three new services and virtual multichannel video program distributors (MVPDs), such as YouTube TV and Hulu Live, expected to grow in adoption, consumers may end up with more choices for consuming content than they know what to do with, and in such a scenario, they may look to the software on streaming devices for a solution.

Search data in particular gives [Streaming TV Platform] valuable insights into household tastes and demand for different kinds of video content. That information could be extremely valuable to streaming services trying to solve the cold-start problem, which limits personalization for new customers and helps to lock customers into the services they already use. Those kinds of insights into consumer preferences could also help studios with production decisions, an advantage Amazon and Netflix both exploited (to great effect) when they entered the market for original video content - and Facebook surely will too next.

Matching the information advantage (read: data) of those big tech companies (along with Google) is one of the reasons so many companies are increasing investments in 1st, 2nd and 3rd party data. [Streaming TV Platform]'s neutral position on content, when compared to the big tech companies investing in video content, put it in a unique position to help. Streaming service providers might limit [Streaming TV Platform]'s visibility into viewing behavior within their apps, but many other avenues are still open to [Streaming TV Platform] for collecting consumer data.

What if [Streaming TV Platform] offered consumers an alternative to the digital tracking which is so often perceived as tantamount to spying? [Streaming TV Platform] could instead empower users to store data on their preferences and viewing histories in private data vaults on the [Streaming TV Platform] platform and allow them to decide which [Streaming TV Platform] channels get to use that data to improve their user experiences? How much more valuable might [Streaming TV Platform]'s audience data then become? How much more valuable might [Streaming TV Platform] then become to its users?

With so many monetization options, [Streaming TV Platform]'s first step on the data front should be to analyze what makes its data so unique and valuable. By rating its data, as well as data from MVPDs and other competing sources, across an array of attributes that [Streaming TV Platform] believes to be important value drivers (e.g. implicit vs. explicit, age, household vs. aggregate, etc.), [Streaming TV Platform] can identify its most important differentiators and begin narrowing down the possible applications of its data to a more manageable list of those for which it has the greatest competitive advantage.

The output of such an analysis would be a set of testable hypothesis that become inputs to the customer development process for [Streaming TV Platform]'s data. Customer development is the recursive process of testing and refining hypotheses about customer jobs and a business model to address those jobs. Hypotheses might be tested initially by simply talking to potential customers (e.g. interviews and surveys), moving on to prototypes and user tests next before building an MVP and iterating in market.

Summary and Conclusions

[Streaming TV Platform] still has plenty of room to grow its current ad platform business through effective sales and marketing initiatives, eventually expanding into foreign markets with the help of entertainment OEMs licensing [Streaming TV Platform] software. Given the highly competitive and rapidly evolving video streaming landscape, [Streaming TV Platform] must continue to evolve its product offerings and business model all along the way.

To maximize its growth prospects in both the near term and long term, [Streaming TV Platform] should:

- 1. Prioritize growing market share and share of wallet first by targeting low penetration market segments and customer accounts and working closely with agency partners to communicate the [Streaming TV Platform] value proposition to advertisers.
 - Continue focusing on the user experience to grow its audience as measured by weekly active users, average viewing sessions per week, and average session duration.
 - Consider improving the user experience with features that will generate valuable data and tap into data network effects, such as enhanced search and discovery across channels.
 - Look for improving margins over time as reliance on marketing and discounts decreases and [Streaming TV Platform] progresses along the learning curve for its ad platform business.
- 2. Secondarily, engage current customers to uncover other marketing related jobs with which [Streaming TV Platform] might be able to help using its unique set of assets and capabilities.
 - Explore partnerships to enhance [Streaming TV Platform]'s current value proposition with complementary products and services, such as measuring conversions or remarketing and audience extension.
 - Price audience data for ad targeting at a premium to protect the competitiveness of [Streaming TV Platform]'s own ad inventory.
- 3. Avoid commoditizing [Streaming TV Platform]'s data and gain better visibility into market demand by licensing data directly rather than through an aggregator or data market.
 - Delineate the differentiators of [Streaming TV Platform]'s data with respect to competing sources such as Hulu, Fourthwall, iSpot.tv, Mobitv, Tru Optiks and Samba TV.
 - Formulate hypotheses for valuable applications of [Streaming TV Platform]'s data outside of marketing services and test those hypotheses by experimenting with alpha customers at small scales.
 - Look for innovative ways to generate or acquire valuable new data sets, such as [Streaming TV Platform] user data vaults.
 - Build the infrastructure and appropriate governance to eventually scale up a new data business line by offering data-as-a-service to internal clients today on a service oriented architecture.
 - Proactively manage tensions between new and existing business lines by partitioning resources and leveraging existing infrastructure wherever possible; pull in sales and marketing teams only to scale a business after proving out the product-market fit and business model.