Company: Roku Inc. (Ticker: Roku)

Junior Financial Analysts: Keaton Duchow & Su Qian Ng
Senior Financial Analysts: Chase Lawinger & Ted Bauer & Tyler Eckert

Introduction

Roku, Inc. operates as a TV streaming platform. The company operates in two segments, platform and player. Its platform allows users to discover and access various movies and TV episodes, as well as live sports, music, news, and others. As of second quarter of 2019, the company had 30.5 million active accounts. It also provides advertising products, including videos ads, brand sponsorships, and audience marketplace program; and manufactures, sells, and licenses TVs under the Roku TV name. In addition, the company offers streaming media players and accessories under the Roku brand name; and sells dedicated channel buttons on remote controls. It provides its products and services through retailers and distributors, as well as directly to customers through its website in the United States, Canada and in the Europe. The company was founded in 2002 and is headquartered in Los Gatos, California. The company then went public in 2017 with an initial public offering of $14 per share.

Recommendation – BUY

We observe solid key drivers that would drive the revenue and growth of Roku, along with the fact that the company is planning to expand its business domestically and internationally strategically by investing into technology, talent recruiting, acquisition as well as marketing. We expect a huge increase in number of active users on Roku platform, driving their most profitable business, platform revenue to increase by 46% averagely over the next three years. Combining the valuation that we did that deduces a potential upside of 26%, we strongly recommend a buy on Roku Inc. (Ticker :Roku).

Investment Thesis

Players

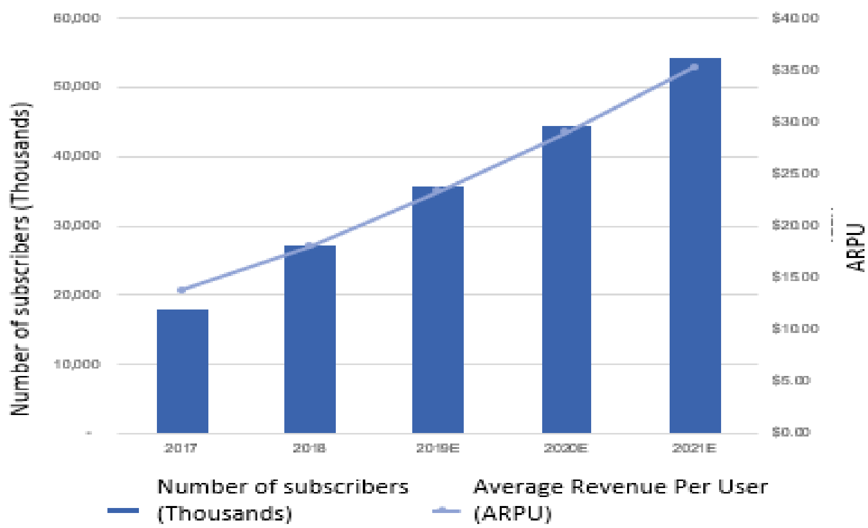
As of third quarter of 2019, around 45% of Roku Inc' revenue comes from their players and devices sales. Roku Inc. sells a variety of devices, from Smart TV, streaming sticks to smart soundbars. Roku Inc is focused on offering low cost streaming players to acquire more new users. Roku TVs integrate Roku Operating System and leverage their smart TV hardware reference design. Roku TV brand licensees include TCL, Hisense, Hitachi, Philips, Sanyo and Sharp. In 2018, more than one in four smart TVs sold in the United States were Roku TVs. Their current streaming player line for the U.S. market includes several models at a range of manufacturers' suggested retail prices to meet the needs of different users.

Platform

Roku's platform revenue has been growing rapidly over the years. Roku Inc generates platform revenue from advertising sales, subscription and transaction revenue share, sales of branded channel buttons on remote controls and licensing arrangements with TV brands and service operators. Instead of getting a cut of ad sales revenue, Roku Inc acquires 30% of advertisement inventories on ad-supported channel on Roku and sell the ad spaces subsequently for 100% revenue. Other than that, content publishers pay a subscription/license fee in order to be featured on Roku's homepage. On top of that, Roku gets a 20% share of subscription revenue if users subscribe for paid premium channels like Netflix through Roku platform. Roku also monetizes Roku Pay to maximize revenue from these subscriptions. Subsequently, Roku sells dedicated buttons on the remote control that lead audience directly to the premium channel for a premium. The graph below indicates how much subscription and average revenue per user(ARPU) on Roku are growing. In fact, Roku's ARPU is 40% higher than Netflix's most expensive plan's ARPU and that indicates how well Roku monetize its platform.

Key Drivers

Emerging Streaming Services Platforms



Other than the existing competition between current streaming services like Netflix, Disney+, Apple TV, we are anticipating emerging streaming services platform like AT&T TV, HBO Max, Peacock + in 2020. The increasing competition between these streaming services benefits Roku. In order to compete against each other, content publishers are willing to pay a premium to be featured on Roku's homepage, to attract new subscribers efficiently. Other than that, Roku Inc. has been monetizing its platform successfully by selling its advertisement inventories acquired from their agreements with the ad-supported channels on their platform. In short, the intensity of the competition between these existing and emerging streaming services platforms brings more revenue to Roku, especially to its platform. With that being said, we expected a steady growth of 35% over the 5 years.

Expanding International Markets

We would like to emphasize that around 90% of Roku's current revenue come from within the United States, indicating that there is so much growth opportunities in the global market. In order to expand efficiently, Roku carefully selected its initial adjacent markets in terms of geography and psychic distance, or perceived differences between markets. Roku started setting foot into the United Kingdom with only its streaming devices. They are now setting eyes on France and Brazil. We would also like to compare Roku's international expansion to Netflix's globalization in 2017 as they somehow have similar business models. To put that into perspective, Netflix's subscriber base was just 17 million when they launched international expansion in 2010, and it now boasts more than 158 million total subscribers. Roku's active accounts currently top out at just 35 million, while Roku accounted for just 4%

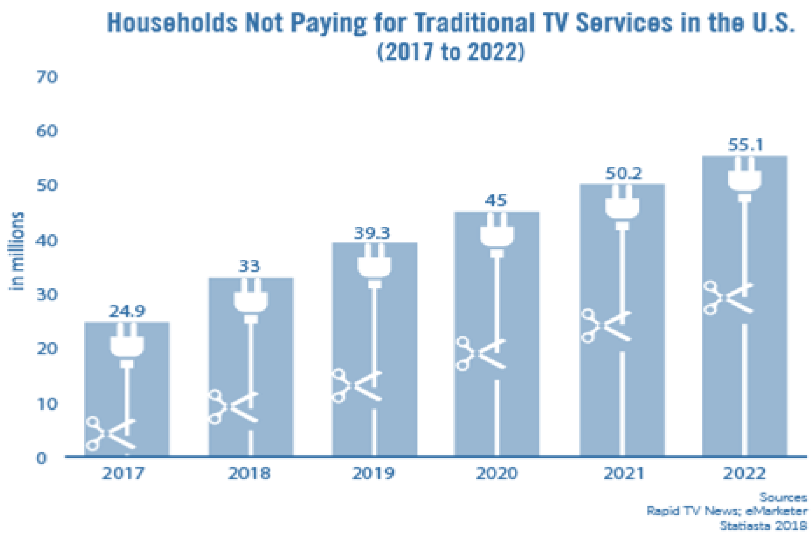
of the Smart TVs in 2018 internationally but around 50% of the smart TVs in the United States are labelled Roku, showing just how far the company could grow in both platform and player.

Cord-Cutting

The number of cord-cutters has been increasing exponentially year over year with the sky-rocketing cable bill in the United States. On average, cable bill costs around $210 while over-the-top streaming services costs an average of $8.53 per service. It is estimated that in United States alone, around 56 million households in total will have canceled cable or satellite TV subscriptions by 2023. Based on past data, more than 50% of U.S. cord-cutters are Roku customers. Our estimates predict that the company would be adding 20% additional customers annually. Moreover, an average American subscriber has 3.4 streaming services and a total of $29 or $8.53 per service. This shows approximately how much revenue cord cutters would bring to both Roku's platform and players. On top of that, only 3% traditional televisions advertising budgets are currently spent on connected televisions now, with customers switching from traditional televisions to connected televisions, we expect majority of the spending going into over-the-top platforms.

Dataxu Acquisition

Roku Inc. recently acquired Dataxu, which is a demand side platform (DSP). A DSP is a system for



advertisers to purchase and manage ad inventories from multiple ad sources through a single interface. Dataxu uses intelligent software which bids on the inventories using an auction or real-time bidding process. With acquisition of Dataxu, buying and selling of ads on Roku will be cheaper and more reliable. Dataxu's addition to Roku is also expected to boost Roku's performance in terms of effective outreach to unique audience. Recent studies found that Roku platform were 67% more effective per exposure at driving purchase intent from linear tv ads and 15% of audience age 18-34 can only be reached via Roku. With the lowered barrier to purchase ads, the shift of advertising budget from linear televisions, and its large audience base, Roku is expected to boost its platform revenue to grow by at least 44% in 2020.

Valuation

Discounted Cash Flow

Our first valuation technique was to use a discounted cash flow model and incorporate a sensitivity analysis using discount rates between 9.1%-11.2%. Keeping an average of 4% perpetual growth we found a target price range of $165.74-$183.59 or 14%-27% upside. We choose 4% because we wanted a conservative estimate and the 3-year CAGR for the two revenue streams were 102% for platform revenues and 6% for player revenues. We didn't think that the platform revenues would keep this high of an increasing rate and see the player revenues slowing down over the next couple years. Thus, to be conservative we choose a low growth rate which we believe could be realistic as more competitors come into the industry.

Economic Value-Added Model

To use our EVA Margin software, we needed to estimate Roku's sales growth over the next five years we found the percent of platform revenue that is makes up advertising, subscription, and transaction revenue share and the number of paid subscriptions which was about 85%. From this we then looked at the market share of advertising revenue for all connected TV's which Roku represents about 10% of. Using this 10% market share, we estimated sales over the next five years based on total advertising spending increases for connected TV. The future player revenue which is about 43% of Roku's total revenue was estimated using a similar technique. Roku has about a 40% market share compared to its competitors, this was then multiplied by the estimated connected TV purchases over the next couple years and a device price of $30 (which is their lowest product price). Also including a sensitivity analysis, we obtained a target price range of $141-$180 or -2%-24% upside, using a 9.1%-11.2% WACC range.

Combination

Combining using a 40% weight for our DCF model and 60% weight for our EVA model. We choose to weight our EVA model heavier due to Roku not exhibiting earnings currently. From this, we found target price ranges between $150.90 and $181.44. These then represent a potential upside of 5% to 26%.

Risks

Volatility

Investors are often overreacting to the wrong news in the industry and leads to plummeting in the stock prices. Say for example, Roku's stock price plunged 12% and 15% after the launch of Apple TV+ and Disney+ streaming services. These plunges are not justified because Roku is not a competitor in the TV streaming services arena. Instead, it benefits from an increasing number of TV streaming services. The stock price also dropped when Comcast launched Xfinity Flex. Investors surely over-reacted because Roku's business is barely harmed due to its dominance in the United States, its publisher agnostic and its variety of contents available on platform. Thus, we see this as a low risk that occurs frequently, and Roku often recover from the price drop soon after.

Negative Earnings

Although Roku Inc's revenue has been growing exponentially ever since it went public, the company is still having a negative earning up till third quarter of 2019. We do not see that as a worrying risk factor for now because the company has been constantly increasing their R&D expenses in engineering, talent recruiting, most importantly acquisition and international expansion. We foresee a breakeven in early 2020s, given that their international market will be maturing by then in addition to the key drivers that would keep driving Roku's revenue higher and these facts are supported by estimates on Bloomberg and ISS EVA and financial analysts.

	2017	2018	2019	2020	2021	2022
EPS	-2.18	-0.07	-0.33	-0.39	0.07	1.08

Competition

As of now, we do not see a direct competitor that has a similar business model as Roku. We would also like to emphasize that streaming services platforms like Disney+, Netflix and Hulu are customers instead of competitors to Roku Inc. Hence, we break down the competition into platform and players. In terms of players, Roku has faced considerable competition for a while. Apple released the first version of Apple TV before the first Roku device went on sale. Amazon entered the market in 2014 and has been extremely aggressive in grabbing market share since. Still, Roku is the leading streaming device in the U.S. by most measures. On the other hand, Facebook's Portal TV hasn't been gaining much recognition and the reviews haven't been very convincing due to their price and lack of contents while Comcast Infinity Flex is lacking in flexibility because their TV Everywhere app requires cable authentication and customers are locked into Comcast's Internet Services. In short, these competitors lack agnosticism. Apple wants users to watch Apple TV, Amazon wants users to stream Prime Video while Comcast will mainly be pushing its Peacock TV while Roku is focusing on manufacturing better Smart TVs and operating systems in addition to fully utilizing the competition between the streaming services platforms to acquire more contents and advertisement inventories to boost their platform revenue.

Short Term Agreements

Most of Roku's agreements with content publishers have varying expiration dates, typically from one to three years. Any disruption in the renewal of such agreements may result in the removal of certain content from platform and may harm their active account growth and engagement. If content publishers disagree to renew the agreement, Roku may have to temporarily or permanently remove certain contents from their platform. The loss of such content from the platform for any period of time may harm their business. However, given that Roku has such huge, active and engaged customer base, content publishers are unlikely to not renew agreement with Roku in order to gain subscribers especially when Roku is expanding overseas.

Management

Roku's management structure is comprised of three main key contributors. Anthony Wood is the Chairman, Founder and CEO and has been with the company since its creation in 2002. He previously worked for Netflix where he was the VP of InternetTV and helped in deals with LG and X-Box. Also founded ReplayTV, one of the first DVR companies that competed heavily with TiVo. He has a vast amount of industry knowledge and is primarily payed through stock options and performance based incentives. Scott de Haas is the Senior VP-Product Engineering & Operations and has been with the company for 8 years. Previously a Senior Systems Analyst Architect at Pace and also working with Intel Corp and 2Wire. In these positions he learned how the business of silicon and hardware engineering operates. Lastly, Steve Lounden MBA is the current CFO and has been with the company for 4 years. In his past career he held the position of Vice President-Corporate Finance & Treasurer at Expedia Group. His salary is also paid primarily through stock options and performance based compensation.

1-Year Stock Chart Performance

Peer Analysis

Roku's main competitors are very hard to justify. With Roku and Amazon holding about 70% of the market share in the streaming device market, they are out competition their peers. Others could include Google and Apple, although its very hard to compare these companies who's streaming device and platform revenues comprise a small percent of their overall revenue streams. That being said, Roku does have the ability to focus solely on this one segment compared to the other companies that would be considered their peers. Roku is increasing its market share and revenues for this segment faster then the other competitors.

Ownership of Shares

Of the total shares that Roku has 40% holdings attributed to Mutual Share Holders, 4 % held by individual stakeholders, and 33% held by other institutional holders. The top 5 instituions that hold Roku are The Vanguard Group at 8.14%, Fideltity Management and Research with 6.93%, Morgan Stanley Investment Management holding 4.75%, Citadel Advisors LLC holding 4.64% and BlackRock Fund Advisors with 3.77% ownership.