

FINAL PROJECT REPORT

On



INFORMATION SYSTEM POLICY & STRATEGY - MSIS 2604



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EXECUTIVE SUMMARY

Since its inception, Roku has established itself in the growing OTT industry and has garnered cost advantage over other content providers which are offering their services at a very competitive rates to grab shares in the fast-growing area of content distribution.

External analysis of Roku's position in the market demonstrates that it has opportunity to expand its device penetration with reliable content delivery and this can be achieved through development of competitive business processes and strategies. It has intense competition coming from big players like Google, Apple and Amazon who already have a huge brand following. Through our analysis we found out that Internally Roku has created few critical success factors like customer satisfaction and subscription plans, number of content offerings. On the financial front, the analysts expect Roku to grow earnings at an average annual rate of 17% over the next 5 years tenure.

For Roku to endure its growth, we recommend that they must continue to expand their portfolio by fostering long-term relationship with content suppliers, establish more sustainable distribution methods, and enhance TV watching experience by making it more interactive and convenient unlike static channels. They have huge opportunity in content distribution and advertising as they have witnessed overwhelming growth in advertising business and licensing deals. Moving forward if their profit margin increases significantly then we recommend them to invest in marketing to strengthen its brand following. Roku must continue to innovate and evolve, leveraging their competencies to solidify its market position.

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1. COMPANY HISTORY AND TIMELINE

^[1] Roku was founded in October 2002 as Limited Liability Company (LLC), by ReplayTV founder Anthony Wood. *Roku* (六) means "six" in the Japanese language, to represent the fact that Roku is the sixth company Wood started.

YEAR	EVENT
Oct, 2002	Roku started as a limited liability company (LLC), by Anthony Wood.
Apr, 2007	Founder Anthony Wood named as Vice President for Netflix
Feb, 2008	New Roku company setup to make players for Netflix with Netflix investing \$6 Million
Jul, 2008	Company headquarters moved to Saratoga in California.
Oct, 2008	The first round of venture capital funding from Menlo Ventures announced
Early 2009	Second round of VC funding of about \$8.4 million was disclosed in 2009
Early 2015	The company announced it would be sub-leasing the buildings in Los Gatos, California from Netflix
Early 2016	Roku partnered with Magna, in order to incorporate targeted advertising on its streaming platform
Sep, 2017	Initial public offering of company stock began and trading on NASDAQ exchange started
Nov, 2017	Danish-based smart speakers start-up company Dynastrom along with AROS Technology was acquired by Roku
Dec, 2017	Roku launched its self-serving advertising product

2. VISION AND MISSION

^[2] Roku's mission is to be the TV streaming platform that connects the entire TV ecosystem. They connect consumers with the content they love. They help content publishers find their audience and make money.

Reference:

[1] https://en.wikipedia.org/wiki/Roku,_Inc.

[2] <https://www.crunchbase.com/organization/roku#>

They are pushing TV advertising out of the 1940s—when Bulova watches launched the first TV ad—and into the data-driven, machine learning, era of relevant and interactive TV ads. Partnering with TV brands and service operators so they can thrive in this rapidly changing ad world.

3. PRODUCTS & SERVICES

Roku manufactures a variety of products including streaming players and accessories that allow customers to access Internet streamed video or audio services on televisions. Roku provides services in licensing its hardware and software to other companies. Some of the Roku's key products in the market are :

^[3] **Roku Products: Streaming Player**

The company sells several models of streaming players that consumers use to stream video over an internet connection. Models include boxes that connect to TVs with cables and sticks that resemble USB memory drives that plug into ports on TVs. Roku Streaming Players are set-top boxes for the delivery of digital media content. Both free and paid "channels" such as Netflix, Hulu Plus, Amazon Video, and others are available, as well as some games.

Roku TV - Roku TV is a smart TV with an access to over 500,000+ streaming movies and TV series, plus live-streaming news, TV, sports and more. While accessing cable box or HDTV antenna, it can also fire up gaming console.

Roku Express - This is Roku's best-priced player that delivers smooth HD streaming experience on your big-screen TV. It can stream free and paid channels with 5x more power than the previous generation Roku Express. It is an attractive product for First-time streamers.

References used:

https://www.sec.gov/Archives/edgar/data/1428439/000156459018004134/roku-10k_20171231.htm

[3]<https://www.roku.com/products>

https://en.wikipedia.org/wiki/Roku,_Inc.

<http://subscriber.hoovers.com.libproxy.scu.edu/H/company360/overview.html?companyId=12171000000000>

Roku Express+ - With Roku Express+ older TVs can also be turned into a smart TV. It has both composite and HDMI® ports that can start streaming on almost any TV.

Roku Streaming Stick – It gives smooth streaming experience to users on the go. It has voice remote features that lets TV to be easily controlled with buttons for TV power and volume.

Roku Streaming Stick+ - Streaming Stick, super-charged provides vivid picture quality up to 4x the wireless range. It's a great pick for high-performance portability and TVs further from router.

Roku Ultra – It is the most powerful and feature-packed player in the product line with quad-core processor. Roku Ultra is perfect for heavy streaming in HD, 4K, and HDR. It has got all the advanced features like voice remote with buttons for TV power and volume on compatible TVs, headphones for private listening, lost remote finder, and night listening mode.

Miscellaneous Accessories:

Roku also provides accessories like Gaming Remote, Roku Enhanced Voice Remote, Roku Micro USB Power Adapter and Roku In-Ear Headphones.

The Roku Channel

Roku launched its own free, ad-supported streaming channel on its devices in October 2017. At the launch of the channel licensed content from studios such as Lionsgate, MGM, Paramount, Sony Pictures Entertainment and Warner Brothers, as well as from The Roku Channel content publishers like American Classics, FilmRise etc. was included. This service is only available in US and for this they have implemented an ad revenue sharing model with content providers.

Licensing

Roku also licenses its technology and proprietary streaming operating system to TV manufacturers, including Element, Hisense, Hitachi, Sharp, TCL etc. and to service operators including Sky and Telstra.

Advertising

Roku's advertising products and services include display ads on the Roku home screen and screen saver and ad inventory from content publishers. The company analyzes data it collects about its users to provide viewers with relevant ads and measure the effectiveness of ads for advertisers. Subscription revenue is Roku's cut of what Roku users pay to services such as HBO Now, Hulu, and Sling TV while transactional revenue comes from Amazon Video, Google Play, and others.

4. COMPETITORS' ANALYSIS

As reported in August 2017, Roku isn't only maintaining its lead as the top streaming media player device in the U.S., but it's increasing it. Almost 37 percent of streaming devices in the U.S. households are Roku devices, as of the first quarter of the year 2017. That's up from 30 percent in the same quarter last year.

The growth is coming at the expense of Roku's top competitors (Exhibit 16.3), like Apple and Google, with only Amazon's Fire TV able to increase its install base during the same timeframe. Fire TV devices are in 24 percent of U.S. households, as of Q1 2017 (Exhibit 16.4), up from 16 percent last year. That climb allowed Amazon to snag the second position from Google's Chromecast, which has an 18 percent share. Lagging behind, Apple TV's market share fell to 15 percent. Higher-priced devices, such as the Apple TV, have not been able to keep up with low-priced and readily available Roku devices, which can be found at Walmart for as low as \$29.99.

5. BUSINESS MODEL

Roku is more than just a set-top box company. Its media streamers and Streaming Stick are not the only way that Roku makes money. Roku generate player revenue from the sale of streaming players and platform revenue primarily from advertising and subscription revenue share on their platform. They earn platform revenue as users engage with content on platform with an intention to grow platform revenue by monetizing

TV streaming platform. Below are the multiple revenue streams that form Roku's business models giving them an edge over its well-heeled rivals (Exhibit 16.5).

- Player/stick sales
- Revenue through subscription to a partner's channel through Roku
- Licensing the operating system to TV manufacturers
- Advertisement in forms of selling a portion of video advertising inventory, home page/UI takeovers, featured content promotion on the main screen and screensaver

Being an electronics company, Roku makes most of its money by selling its devices that includes streaming players. Also, beyond its own hardware, Roku licenses its software to television makers which manufacture and sell Roku TVs, while integrating its Roku Operating System. Current licensee brands include Element, Hisense, Hitachi, Insignia, RCA, Sharp and TCL. Roku also makes money on content. So, when user rents a movie or signs up for a subscription video service, Roku takes a percentage of that sale. For ad-supported apps, it controls a percentage of the ad inventory, so it can sell its own targeted advertisements. Its advertising platform includes interactive video ads that allow advertisers to include customized clickable overlays that allow viewers to watch additional videos, obtain offer details, get a coupon code via text or find the nearest retailer to buy a product.

6. EXTERNAL ANALYSIS

We have included Porter's Five Force Analysis as apart of Roku's External Analysis

Degree of Competitive Rivalry →(Moderate to high)

Factors that intensifies the force:

1. Big players like Google, Apple, Amazon offers fierce competition.
2. Similar services with slightly different pricing and content packages.

3. High exit barriers

Factors that weakens the force

1. Increasing demand of streaming media from customers
2. More revenues to go around

Threat of potential Entrants → Low

Factors that intensifies the force:

1. The industry is growing and expected to continue growing more in the coming years
2. It's quite promising in terms of profits

Factors that weakens the force:

1. Initial startup cost for contents and technology is expensive
2. Fierce competition among existing big players making entry barrier high
3. Brand loyalty of the big players like Amazon, Google, Apple etc..

Bargaining Powers of Suppliers → Moderate to High

Factors that intensifies the force:

1. Content Providers, Cable network has the power to decide what goes on the platform.
2. There are many players in the OTT industry and supplier has the power to decide to go with one or the other player.

Factors that weakens the force:

1. Switching cost is low with slightly differing pricing model

Bargaining Powers of Buyers → Low

Buyers have no negotiation power.

References used:

<https://techcrunch.com/2017/08/23/roku-is-the-top-streaming-device-in-the-u-s-and-still-growing-report-finds/>
<http://vator.tv/news/2017-12-15-how-does-roku-make-money>

Threat of Substitute → Low

Possible substitutes are gaming systems laptops and smart TVs that support OTT streaming.

Role of Complement → High

Complements include ISPs, Content Providers, Media Partners, Retailers & Distributors and Hardware manufacturer.

The industry includes the big players like Google, Amazon, Apple with slightly different subscription model facing an intense competition. Also, the new entrant will try to enter the market given the profit probability which will instigate the existing players to come up with the different process or product innovations to make their position strong.

Given the dependency of the OTT players on their suppliers like content providers, hardware manufacturers it is very essential for them to expand partnership with all of them. The companies should come up with the different subscription models to suffice the varying demands of their customers.

7. INTERNAL ANALYSIS

For internal analysis, we have included SWOT analysis to check the strategic position of Roku.

<u>Strengths</u>	<u>Weaknesses</u>
<ul style="list-style-type: none">· Accessible· User Friendly· Brand recognition of Affiliates· Inexpensive· No Monthly Fees· Appeals to all ages· Convenient	<ul style="list-style-type: none">· Brand Recognition of Roku· Lack of promotion· Lack of Specific Brand Image

<u>Opportunities</u>	<u>Threats</u>
<ul style="list-style-type: none"> · Lack of Direct Competitors · Consumer Lifestyle · Growing Popularity of Online Media 	<ul style="list-style-type: none"> · Low Barriers to Entry · Possible Substitutes like Gaming Systems, Laptops and Smart TVs · Dependence on the success of other channels (Netflix, HBO GO, Amazon Prime, etc)

8. BALANCED SCORECARD

	Customer Perspective	
	Critical Success Factors	Critical Measurements
1	To increase the type and number of content offerings	Hours streamed
2	Variety of subscription plans to satisfy customer's need	Number of Subscribers for a specific plan
3	Increase customers loyalty	Customer Retention Report/Active accounts
4	Increase customer satisfaction	Customer Satisfaction Survey
5	Better User Interface to provide user friendly customer interaction with the website	Customer reviews
	Financial Perspective	
	Critical Success Factors	Critical Measurements
1	Increase total Net Revenue	Profit Margin
2	To operate business at, or near, break-even on an operating cash flow basis	Cash Flows
3	Meet Shareholder's expectations	P/E ratio
	Internal Process Perspective	
	Critical Success Factors	Critical Measurements
1	Build strong relations with partners	Number of retailers, suppliers and media companies

	Innovation & Learning perspective	
	Critical Success Factors	Critical Measurements
1	Content-neutral	Better consumer experience
2	Not integrated vertically	Variety of content
3	Low-cost device	Customer base

9. FINANCIAL ANALYSIS

Key Performance Metrics used by Roku

Performance metrics like gross profit, active accounts, hours streamed and average revenue per user are the key parameters to evaluate the business, measure performance, develop financial forecasts and devise strategic decisions.

Gross Profit - Roku generated positive gross profit on player revenue, however, most of their gross profit was generated from platform revenue. It is targeting to maximize its high margin platform revenue from active accounts as they stream content on platform. The gross profit was \$199.8 million, \$121.0 million and \$89.8 million for the years ended December 31, 2017, 2016 and December 26, 2015, respectively (Exhibit 16.7.1).

Active Accounts - Roku defines active accounts as the number of distinct user accounts that have streamed content on their platform in the last 30 days of the period. The number of active accounts is relevant to measure the size of their user base and the opportunity to increase platform revenue and gross profit. It reported 19.3 million, 13.4 million and 9.2 million active accounts at the end of December 31, 2017, 2016 and December 26, 2015, respectively. (Exhibit 16.7.2)

Hours Streamed – This metric defines hours streamed as the aggregate amount of time users streamed content on Roku’s platform in a given period. The usage of platform is an effective measure of user engagement and that the growth in the number of hours of content streamed across Roku’s platform

reflects its success in addressing the growing user demand for TV streaming. Increased user engagement on the streaming platform indicate increase in gross profit. Roku streamed 14.8 billion, 9.4 billion and 5.5 billion hours during the years ended December 31, 2017, 2016 and December 26, 2015, respectively. (Exhibit 16.7.3)

Average Revenue per User – ARPU is platform revenue during the preceding four fiscal quarters divided by the average of the number of active accounts at the end of that period and the end of the prior four fiscal quarters. Roku measures progress on its platform business using ARPU as it reflects the rate at which they are monetizing their active account base. Their ARPU was \$13.78, \$9.28 and \$6.48 at the end of December 31, 2017, 2016 and December 26, 2015, respectively (Exhibit 16.7.4).

Roku differentiates its sources of revenue into two segments - player, which represents sales of its digital media boxes, and platform, which includes advertising sales and a variety of other services. Player revenue is generated from the sale of streaming players through consumer retail distribution channels while Platform Revenue is generated 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.

Comparison of Financials for Years 2017-2016

Net Revenue - Roku reported a total net revenue of \$512.76 million in F17 out of which Player contributed to \$287.40 million and platform to \$225.35 million. Player revenue decreased by 2% for the year ended December 31, 2017 as compared to the year 2016.

Cost of Revenue - The total cost of revenue for the year 2017 increased by 13%. The cost of player revenue increased by \$8.3 million as compared to the year 2016. The cost of platform revenue increased by 97% for the year 2017.

Note- All Financial figures taken from SEC filing of 2017

Reference:

<https://ir.roku.com/static-files/2b519a8d-bc2c-45f1-b98c-a7be8b7f35db>

https://ir.roku.com/node/6491/html#toc403225_1a

Operating Expenses - Research and development expenses increased by 42% for the year 2017 due to increase in headcount, higher cost of consulting and outside services of \$3.2 million offset by a decrease in facilities expenses of \$0.5 million. Sales and marketing expenses increased by 21% for the year 2017. General and administrative expenses increased by \$12.1 million or 34% for the year ended December 31, 2017 as compared to the year 2016.

Analyst forecast - ^[5] Over the next five years, the analysts expecting Roku to grow earnings at an average annual rate of 17%. This year, analysts are forecasting earnings increase of 80.98% over last year. Analysts expect earnings growth next year of 72.77% over this year's forecasted earnings. ^[4] Currently, the analyst consensus on Roku Inc has assigned a Hold rating to the stock with a \$26 price target.

Summary of recent Earnings Call

^[6] Roku started FY2018 on a high note, almost beating its quarterly guidance and raising the full-year guidance. It is rapidly expanding its user base (+47% y/y) while also making more platform revenue from each user (+50% y/y). Platform revenue is highly profitable, with gross margins over 70%. It remained unprofitable but has potential to change the scene in the second half of 2018. Impressively, Roku has been able to beat its earlier projection for the first quarter in revenue, gross profit, net income, and adjusted EBITDA, and raised the full-year guidance for each category. (Exhibit 16.8)

10. MULTIPLE DIMENSION OF VALUE

Technology Standalone Value: High

Roku players provides consumers with instant, on-the-go access to their favorite content. Streaming gives users over-the-top offerings to watch countless channels through “pick and-choose” model. Roku player hardware includes implanted software with indefinite upgrades on the when-and-if-available basis.

Note- All Financial figures taken from SEC filing of 2017

References:

[4] <http://www.markets.co/roku-inc-receives-a-hold-from-oppenheimer/>

[5] <https://www.nasdaq.com/symbol/roku>

[6] <https://seekingalpha.com/article/4172120-roku-starts-2018-bang>

Roku's hardware and embedded software are taken as a single unit since they independently don't have standalone value and aren't sold separately. (Exhibit 16.9) ^[7] Access to over 3,000 streaming channels, 500,000+ movies and numerous TV shows in the United States, also with live sports, music, news and more, and Roku's wide-ranging and unbiased worldwide search and discovery features make Roku player of masses.

Ease of Use- With Roku, picking shows is mindlessly easy, its on-screen display is both simple to view and to navigate. Users can smoothly search for movies and TV shows across Netflix, Crackle, Amazon and YouTube.

Value to Customer- Roku offers wide range of product and services. From new smart TV users to experienced users, it has products for every consumer segment within reasonable prices.

Network Externality Value: High

Roku's consumer's victory with TV streaming, not just their experience is enhanced but also, they get more entertainment selections. The content quality also improves as more and more users are onboarded on the platform. Roku lets consumers personalize their content selection that fit their budgets and needs. Roku platform include Ad-supported channels like Crackle, CBS News, The CW and Vice; subscription channels like Netflix, Hulu and HBO Now; traditional pay TV replacement services like DirecTV Now, Sling TV and Sony PlayStation Vue; and transactional channels include Amazon Video, Google Play and Vudu. Consumers are streaming more ad-supported content. ^[8] In the six months ended June 30, 2017, hours streamed on platform that included advertising grew up 76% year-over-year from the six months ended June 30, 2016. In 2017, searching for free content was the top reason users visited their website other than to manage their Roku accounts.

References used:

<https://www.networkworld.com/article/2223602/smb/5-reasons-why-the-roku-is-the-best-internet-tv-streaming-box-choice.html>

<https://www.multichannel.com/blog/cable-and-ott-friends-benefits-407331>

[7] <https://blog.roku.com/roku-remains-the-most-popular-brand-of-streaming-players>

[8] https://www.sec.gov/Archives/edgar/data/1428439/000156459018004134/roku-10k_20171231.htm

Size of Installed Base- Roku handles more than 19.3 million active accounts and users streamed 14.8 billion hours on the Roku platform during 2017.

Availability of Complementary Goods- Roku's platform enables content providers to stream their content on a widely used platform. Also, Roku's hardware features gave it an edge over its competitors.

11.VALUE CHAIN ANALYSIS

Value-Chain Activity	Strengths	Weaknesses
<i>INBOUND LOGISTICS</i>	^[9] Content from Content owners such as Paramount and Warner Bros. along with content from internet television service providers and advertisers.	Dependency on providers for Content to maintain user base.
<i>OPERATIONS</i>	<ul style="list-style-type: none"> Aggregate the licensing rights of the content Operations activity relates to keeping the subscribers happy with the titles that they have coming in Roku also licenses its technology and proprietary streaming operating system to TV manufacturers, including Element, Hisense, Hitachi, Sharp, TCL etc. and to service operators including Sky and Telstra 	Need to maintain a large subscriber base to monetize their operations.
<i>OUTBOUND LOGISTICS</i>	With the help of various ISPs and Roku devices the content is delivered to the customers/subscribers	Dependency on ISPs & hardware manufacturers.
<i>MARKETING</i>	The company's business strategy is to use its hardware to grow its audience and monetize that audience through advertising. Roku is also focusing on creation of integrated and insight-based advertising solutions and build the Roku advertising organization's brand among marketers and agencies.	Roku as a brand is not widely recognized.

<i>SERVICES</i>	<ul style="list-style-type: none"> • Provide convenience of viewership along with Instantaneous DL streaming on to numerous households' devices simultaneously. • Roku manufactures a variety of products including streaming players and accessories that allow customers to access Internet streamed video or audio services on television 	
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SUPPORT ACTIVITIES	
<i>INFRASTRUCTURE</i>	This includes departments like management, finance, legal, etc., which are required to keep the company's stores operational
<i>HUMAN RESOURCE MANAGEMENT</i>	employees, particularly engineers and other product developers, are in high demand, and Roku devotes significant resources to identifying, hiring, training, successfully integrating and retaining these employees
<i>TECHNOLOGY DEVELOPMENT</i>	Continue R&D in the streaming market. As the technological infrastructure for Internet access continues to improve and evolve, consumers will be presented with more opportunities to access video, music and games on-demand with interactive capabilities

Reference:

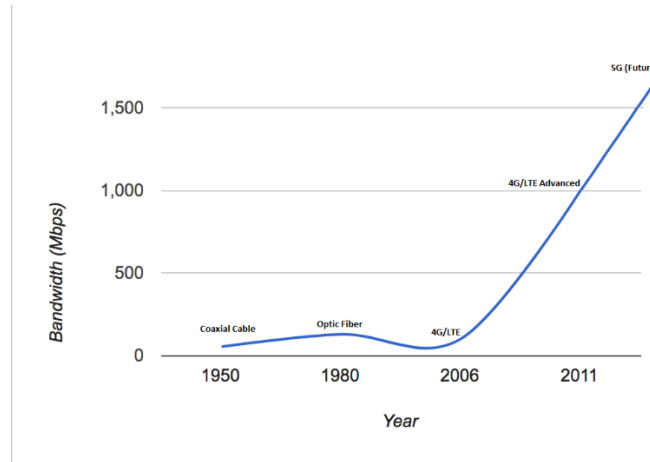
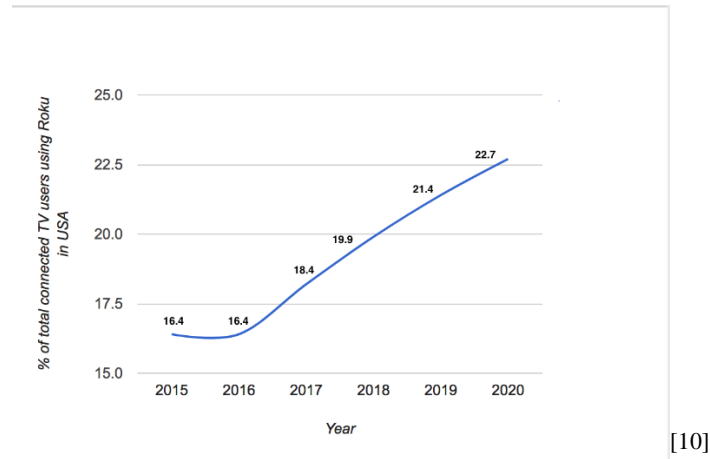
<https://www.multichannel.com/blog/cable-and-ott-friends-benefits-407331>

<https://www.businessnewsdaily.com/5678-value-chain-analysis.html>

[9]<https://www.nakono.com/tekcarta/analysis-insight/over-the-top-internet-television/over-the-top-ott-internet-television-market-analysis/>

[10]<https://www.emarketer.com/Chart/Select-US-Connected-TV-Users-by-Device-2015-2020-of-total-connected-TV-users/199322>

12. S-CURVE



13. STRATEGIC IMPLEMENTATIONS

Advertising- Roku is known for its set-top accessories that connect televisions to streaming services like Netflix, Sling, Amazon, Hulu etc. But with television technology advancement, smart televisions with built in software are becoming the norm of the day, reducing the demand for Roku's gadget services. Meanwhile, Roku's advertising business witnessed overwhelming growth, making more money from licensing deals that install its software into Roku-branded TVs and other devices and advertising its shows to its users.

Reference:

[10]<https://www.emarketer.com/Chart/Select-US-Connected-TV-Users-by-Device-2015-2020-of-total-connected-TV-users/199322>

The platform revenue including ads saw a growth of 137 percent year on year with two-thirds of this platform revenue coming from ads, while the hardware sales grew 4 percent as per recent earnings call. Despite lower growth, hardware sales continue to constitute majority of Roku's revenue.

The facts indicate that advertising will be the key revenue and profit driver for Roku. Advertising constitutes two-thirds of Roku's platform business. Roku has been aggressively expanding its reach in the advertising segment. As per Nielsen Digital Ad Ratings, Roku is the first OTT TV platform to offer audience guarantees, closing the gap between OTT TV and traditional TV.

^[11] **More of Roku's new accounts now come from its TVs than other devices:** During the quarter just ended, Roku saw more new user accounts being created through its licensed TVs than its own gadgets. As Roku is witnessing a strategic shift in its business towards its advertising business, this movement is important to bolster this growth, as it is looks to stockpile valuable user information. As per stats, Roku now has 17.7 million active accounts, 48 percent increase year on year.

Roku's been driving down its hardware prices to grow its user base: Roku has been playing its part in new user additions by lowering its device prices for new users.

The average price of its hardware dropped 23 percent from the same time last year, while it boosted sales by 35 percent.

"We strategically pass along player cost savings to consumers by actively driving down prices to grow active accounts," the company said in a shareholder letter Wednesday.

Reference:

https://www.sec.gov/Archives/edgar/data/1428439/000156459018004134/roku-10k_20171231.htm

^[11]https://mashable.com/2017/11/08/roku-first-earnings-report/#J_i6ChwhWkq1

With this strategy, the company is trading off short term gain from device sales for long term stability. As the company is making a strategic shift from hardware sales to advertising and platform business, new user additions is much more valuable. As hardware sales keep diminishing, Roku can make the most of the huge user base by selling advertising around them far down the line.

Roku isn't going heavy on marketing: Being a lesser brand compared to its giant Silicon Valley rivals, Roku has done well to keep its marketing expenses down. It instead relies on strategic placements that its branded TVs afford in the electronics aisles and online listings, while cashing in on its reputation earned over the years in the segment.

14. RISK ASSESSMENT

Roku's business involves significant risks, that are mentioned below.

Risks Related to Roku's Business and Industry:

- The TV streaming industry is highly competitive with many large tech companies, TV brands and service operators actively focusing on it. If Roku fails to compete with these companies it will be difficult for them to attract users and business may be harmed.
- Failing to maintain relationships with content publishers is one of the very important risks that Roku Inc faces.
- Roku does not have manufacturing capabilities and primarily depend upon a single contract manufacturer; their operations could be disrupted if Roku encounters problems with the contract manufacturer.
- If Roku's advertisers or advertising agencies do not pay or dispute their invoice, then Roku's business may be harmed.

References:

https://www.sec.gov/Archives/edgar/data/1428439/000156459018004134/roku-10k_20171231.htm
<https://www.inc.com/jaja-liao/roku-took-off-as-a-hardware-company-but-thats-not-its-long-term-plan.htm>

15.CONCLUSION

Overall, we would like to conclude that Roku is a well-established player in the OTT industry and is trying to increase its customer base with its products and service offerings at low price than their competitors. Moreover, they are trying to meet their shareholder's expectation with their overwhelming advertising and licensing revenue.

16. EXHIBIT

16.1 Investors Timeline

Announced Date	Transaction Name	Number of Investors	Money Raised	Lead Investors
9-Nov-15	Series H – Roku	9	\$45.5 M	News Corp.
1-Oct-14	Series G – Roku	2	\$25 M	Fidelity Investment
6-May-13	Series F – Roku	4	\$60 M	Fidelity Investment
25-Jul-12	Series E – Roku	5	\$45 M	News Corp.
1-Aug-11	Series D – Roku	2	\$8.8 M	Globespan Capital Partners
15-May-09	Series C – Roku	1	\$5 M	Menlo Ventures
19-Sep-08	Series C – Roku	1	\$5 M	Menlo Ventures
4-Feb-08	Series B – Roku	2	\$6 M	Menlo Ventures
1-Feb-08	Series A – Roku	1	\$8.4 M	Anthony Wood

16.2 Current Team



Anthony Wood
Founder & Chief Executive Officer



Chas Smith
General Manager, OEM



Stephen Kay
General Counsel



Steve Loudon
Chief Financial Officer



Stephen Shannon
General Manager, Content and Services



Matthew Anderson
Chief Marketing Officer



Ben Strong
Director of Product Management, Roku Direct Publisher



Greg Calvert
Director of Business Development, Pay TV Americas

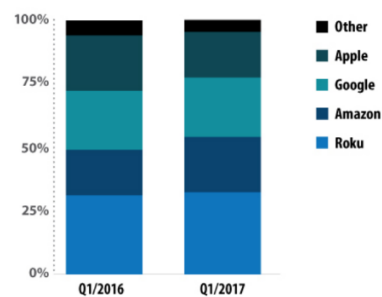
16.3 Product Comparison

				
	CHROMECAST	APPLE TV	ROKU	FIRE TV
PRICE	\$35	\$99	\$49 - \$99	\$99
FORM FACTOR	Stick	Box	Box or stick	Box
CONTROLS	App only	Remote, app	Remote, app	Voice search, remote, app
VIDEO APPS	Netflix, YouTube, HBO GO, Hulu Plus, Crackle	Netflix, YouTube, HBO GO, Hulu Plus, PBS, PBS Kids, Disney Channel	Netflix, YouTube, HBO Go, Hulu Plus, PBS, PBS Kids, Amazon Instant Video, Disney Channel, Showtime Anytime, M-Go, Vimeo, Redbox Instant, Time Warner Cable, Vudu	Netflix, YouTube, Hulu Plus, Crackle, PBS Kids, Disney Channel, Showtime Anytime, Vimeo, Amazon Instant Video
SPORTS APPS	Watch ESPN, Major League Soccer Match Day, MLB.TV	Watch ESPN, Major League Soccer Match Day, MLB.TV, NBA Game Time, NHL Gamecenter, WWE Network	Watch ESPN, Major League Soccer Match Day, MLB.TV, NBA Game Time, NHL Gamecenter	Watch ESPN, NBA Game Time, WWE Network, MLB.TV
MUSIC APPS	Vevo, Pandora, Rdio, Songza, Rhapsody, Google Play	Vevo, Vimeo, iTunes	Vevo, Pandora, Rdio, iHeartRadio, Vimeo, Spotify, Quello	Vevo, Pandora, iHeartRadio, Vimeo, Amazon Music
HDMI COMPATIBILITY	Yes	Yes	Yes	Yes
MEMORY	512 MB	512 MB	New streaming stick supports 256 MB. The boxes could support 512 MB.	2 GB
GAMES	You can play games using your tablet, phone, or computer.	No designated game apps but you can play games from your tablet or phone.	You can play games using the remote.	You can play Amazon Fire's many games through an additional remote or through your tablet and phone.
COOLEST FEATURES	The price is cheap, and the ability to "cast" web pages from your computer to your TV means you can do almost anything. Plus, it doesn't come with a separate remote, so you have one less thing to lose.	The AirPlay feature morphs your TV into a wireless monitor for your Macbook or iPad. The iPhone can be used as a remote.	Remote with earphones. Large library of apps to stream from.	Fire TV has an excellent built-in game library with a good control. The voice search feature will make it very easy to navigate the content library.
WORST FEATURES	Not many native games, so you'll end up with lag playing from your phone or tablet.	Games are laggy, since you're not playing them natively.	HBO GO isn't available for every cable carrier. You can't watch something from Roku on your tablet, PC or computer. It has to be on your TV.	It doesn't have HBO GO.

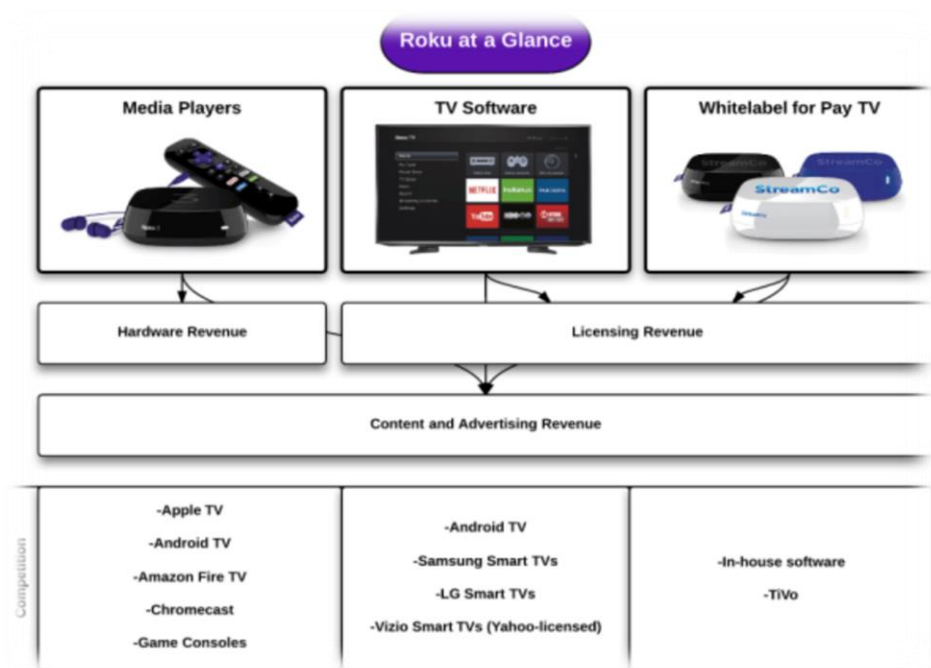
Source: Company websites

BUSINESS INSIDER

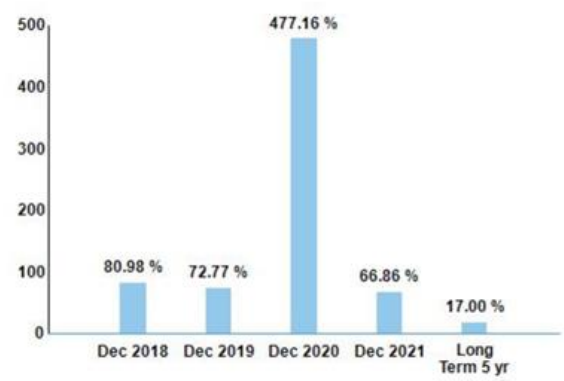
16.4 Market Segmentation



16.5 Roku’s Business Model

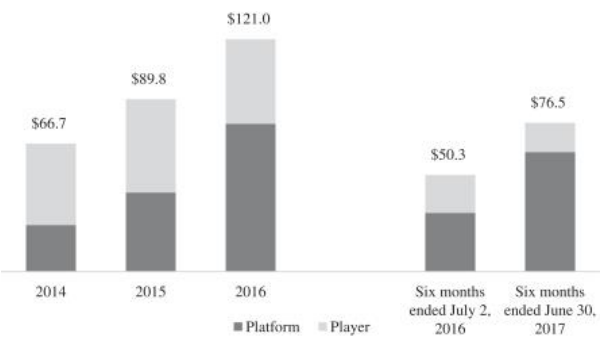


16.6 Expected Roku’s Earnings for 5yrs

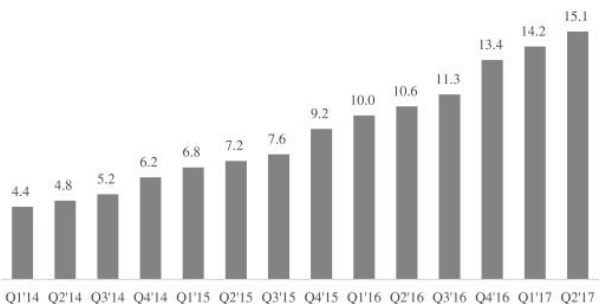


16.7 Key Performance Metrics

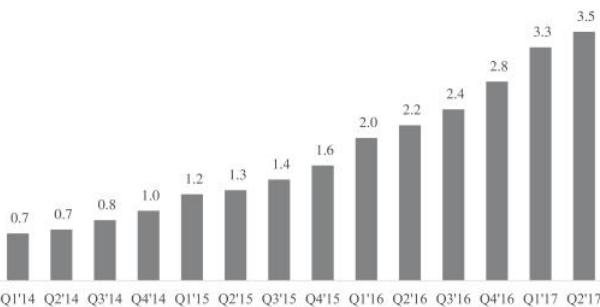
16.7.1 Gross Profit (in millions)



16.7.2 Active Accounts (in millions)



16.7.3 Quarterly Hours Streamed (in billions)



16.7.4 Average Revenue per User



16.8 Earnings Projection for 2018

	1Q18 Guidance	1Q18 Results
Total Net Revenue	\$120 to \$130 million	\$136.6 million
Total Gross Profit	\$52 to \$58 million	\$63.1 million
Net Income (Loss)	(\$21) to (\$15) million	(\$6.6) million
Adjusted EBITDA	(\$16) to (\$10) million	(\$0.8) million

16.9 Buyer Utility Map for ROKU

Stages Utility	<u>Purchase</u>	<u>Delivery</u>	<u>Use</u>	<u>Supplement</u>	<u>Maintenance</u>	<u>Disposal</u>
<u>Customer Productivity</u>	Price is suitable and between Amazon & Apple TV price range		Offers efficient search feature		Regular planned maintenance activities are performed to keep devices updated	
<u>Simplicity</u>			Simplistic features make it easy to use. It operates like regular player			
<u>Convenience</u>		Roku devices	Some models of	Supplements are easily	Roku players require	Buying Roku

		are sold through dealer channels and easily available in buyer's vicinity	Roku devices are mobile and can be used on the go	available at standard prices	minimal upkeep like any other regular players	devices is not big investment. Thus, making it easy to dispose.
<u>Risk</u>			Buyers may face hardware glitches	Dependency on content providers and ISPs		
<u>Fun And Image</u>			Their Feature filled products available at reasonable price range			
<u>Environment Friendliness</u>			Its usage emits negligible pollutants			

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