

**PayPal Holdings, Inc. (NASDAQ: PYPL)  
and  
Roku, Inc. (NASDAQ: ROKU)**

Prepared for Best Ideas 2019, Hosted by MOI Global

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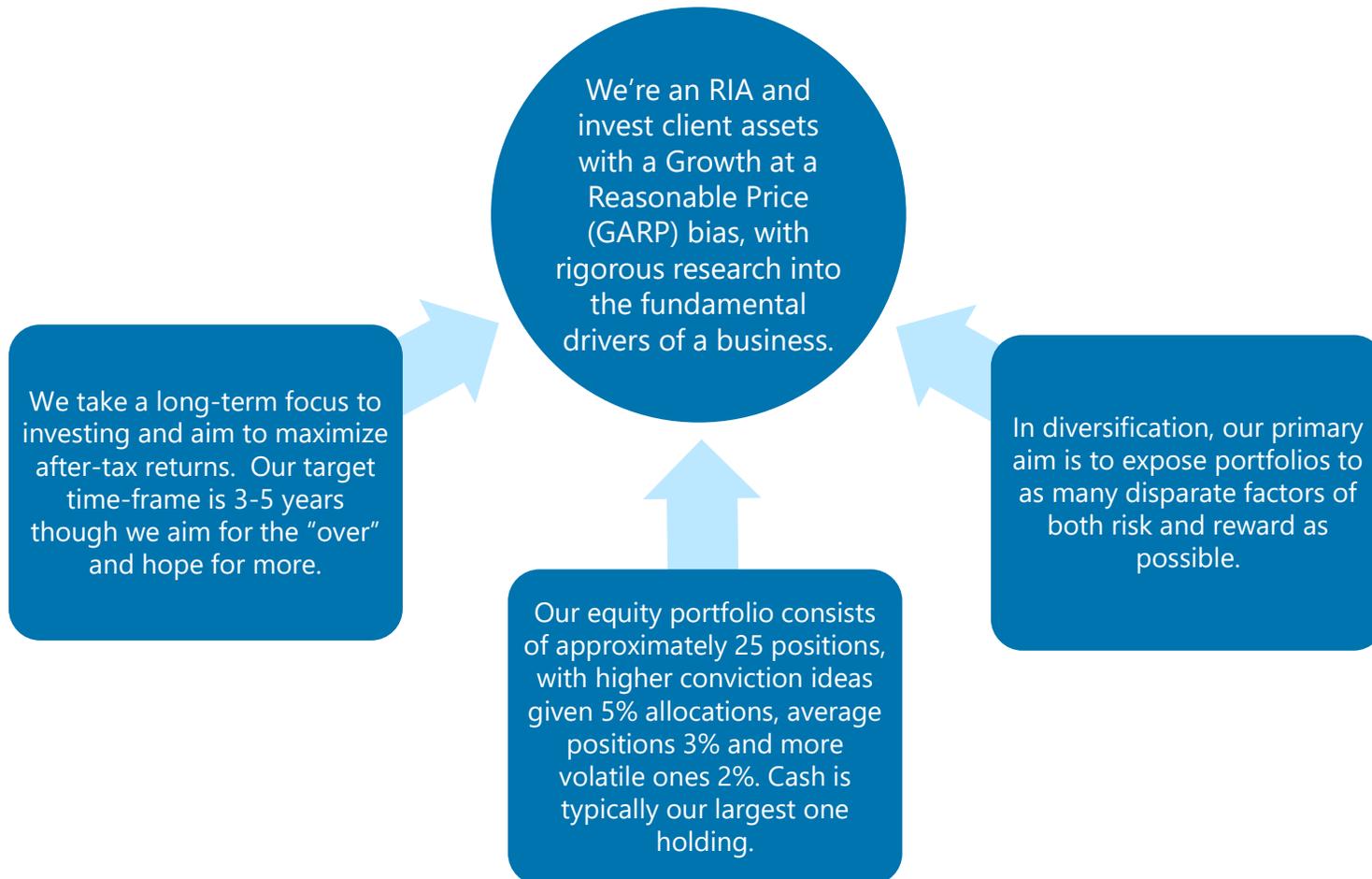
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## Intro

*"Act in such a way that you treat humanity, whether in your own person or in the person of any other, never merely as a means to an end, but always at the same time as an end."*

--Immanuel Kant's Second Formulation of the Categorical Imperative



# The Millennial Generation in the Digital world: too old to be hot startups, too young to be mature

PayPal and Roku each share common traits that make for excellent investment opportunities:

1. Improving unit economics driven by accelerating engagement
2. Large, growing TAM supported by secular tailwinds
3. Open ecosystem connected to committed partners
4. Customer choice and a smooth UX
5. A virtuous cycle connecting all of the above



# PayPal: Doing it Again!

- PayPal is no longer a “means to an end for eBay” – the company has its own essence crafted and driven by Dan Schulman
- The idea is worth revisiting today because after 3+ years of independence we have a much clearer idea of what a standalone PayPal looks like
- Schulman’s background in mobile & payments was the perfect choice for the company and his relationships have been key in executing a partnership driven strategy

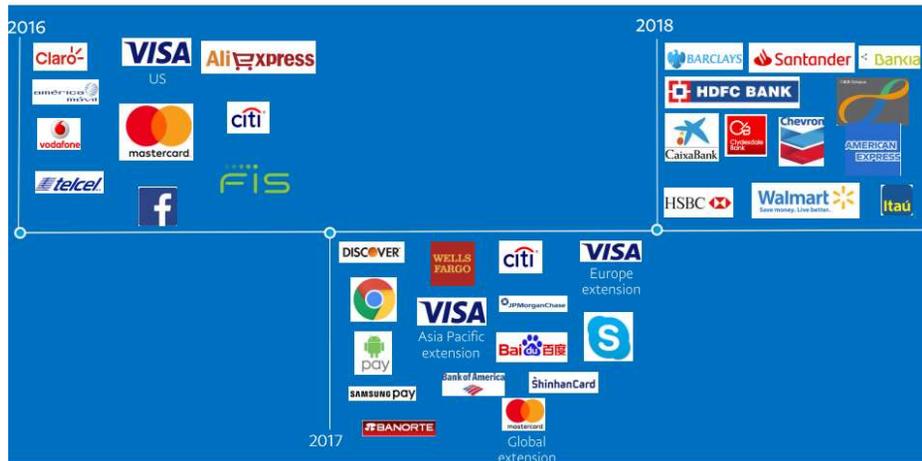


# The Many Partnerships

“So we had a ton of calls coming into customer service, a ton of people churning because they wanted to use maybe their credit card for awards and we were kind of defaulting them more to debit and to balance, cash, low cost for us. And so we've fundamentally changed that model. Every single transaction that a consumer does, now they have a full choice, just like you pull out your physical wallet and you figure out what credit card or debit card or cash that you're going to use, exactly the same now online. Once we did that, that turned us from being a frenemy within the ecosystem to actually being an ally.” – Dan Schulman

## Expanding Strategic Partnerships

Announced 37 partnership agreements since 2016



## Global Partnerships Are Foundational To Our Customer Choice Strategy



- Choice is available in ~200 markets where PayPal is available
- Approximately 55 million consumers adopted into Choice



# Perceptions of Partnership

MARKETS

## Pact With Visa Puts PayPal on Defensive

PayPal's shares have fallen 7% since the deal was announced



Paypal CEO Dan Schulman. PHOTO: LUCAS JACKSON/REUTERS

SHARE



By *Telis Demos* and *Robin Sidel*

July 31, 2016 8:58 p.m. ET

Still, the deal puts pressure on Mr. Schulman, a multiindustry veteran who came to PayPal after serving in senior roles at [American Express Co.](#), [Priceline Group Inc.](#) and Virgin Mobile USA. Specifically, PayPal will have to make up for some higher transaction costs by increasing volume faster and signing up more new customers and merchants.

“They are trying to be something different than they were historically,” said Elliot Turner of RGA Investment Advisors, which oversees about \$25 million in assets. He said PayPal, despite competing in a crowded field, remains a top-three holding for his firm, because he likes Mr. Schulman’s vision and the Visa deal. He didn’t sell any stock after the announcement.

“The level of [customer] engagement will be far more deterministic to the company’s future worth” than transaction costs, Mr. Turner said.

<https://www.wsj.com/amp/articles/pact-with-visa-puts-paypal-on-defensive-1470013132>



# Take Your Take Rate Obsession Elsewhere

- The number 1 debate on this stock is about the take rate and its trajectory. Would you skip out on the chance to invest in AXP in the 1960s or Visa in the 1980s knowing what their take rate would look like?

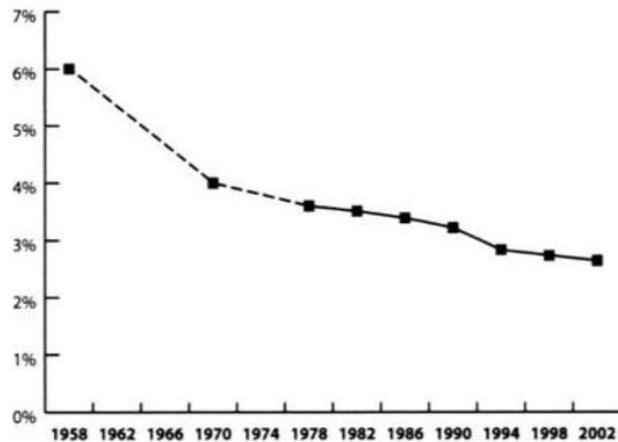


Figure 6.1  
American Express average discount rates, 1958–2002  
Sources: American Express, *Annual Report* (various years); Bernstein Research, *The Future of the Credit Card Industry*; and various trade press.

American Express "take rate" 1958-2002

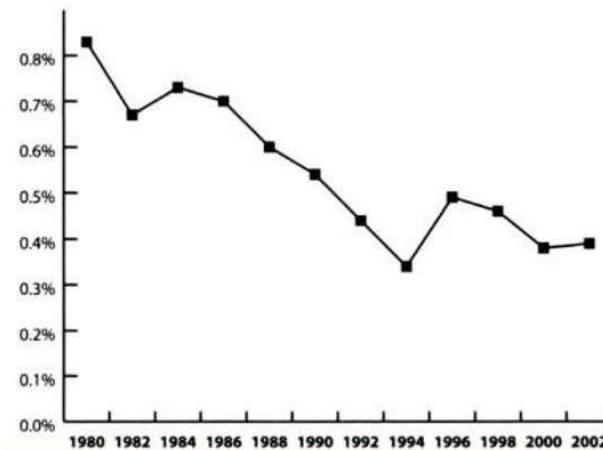


Figure 10.1  
Average net merchant discount, 1980–2002  
Note: Net merchant discount is the merchant discount rate net of the interchange fee.  
Source: Visa U.S.A.

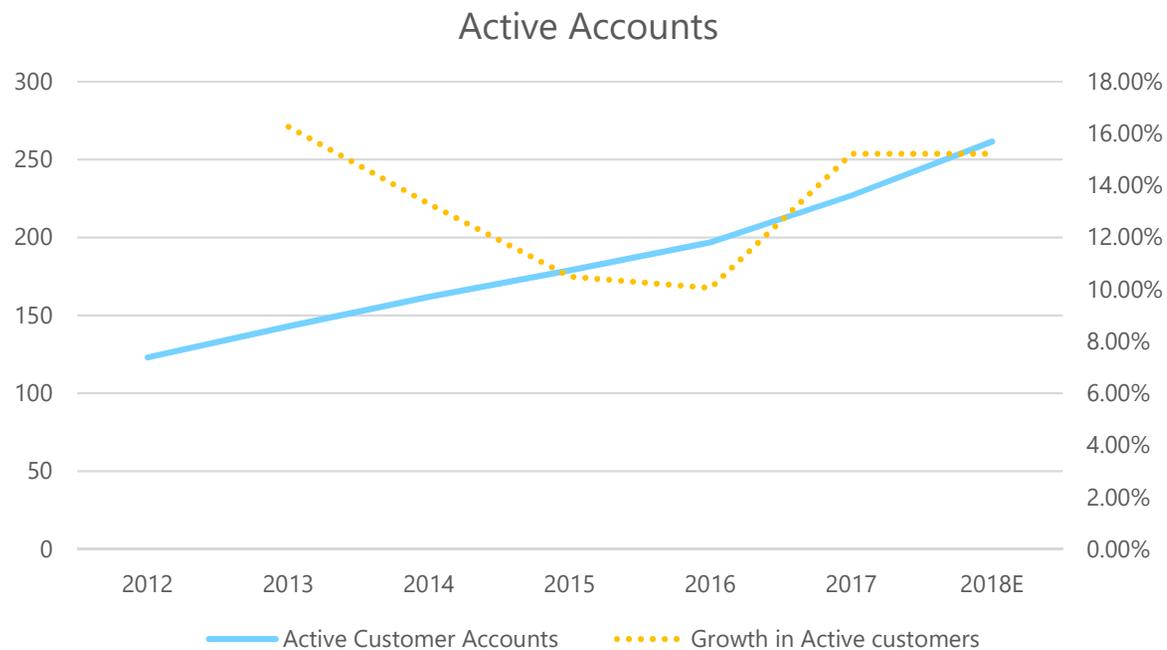
Visa "take rate" 1980-2002

Charts from: Evans, David and Richard Schmalensee. *Paying With Plastic: The Digital Revolution in Buying and Borrowing*.



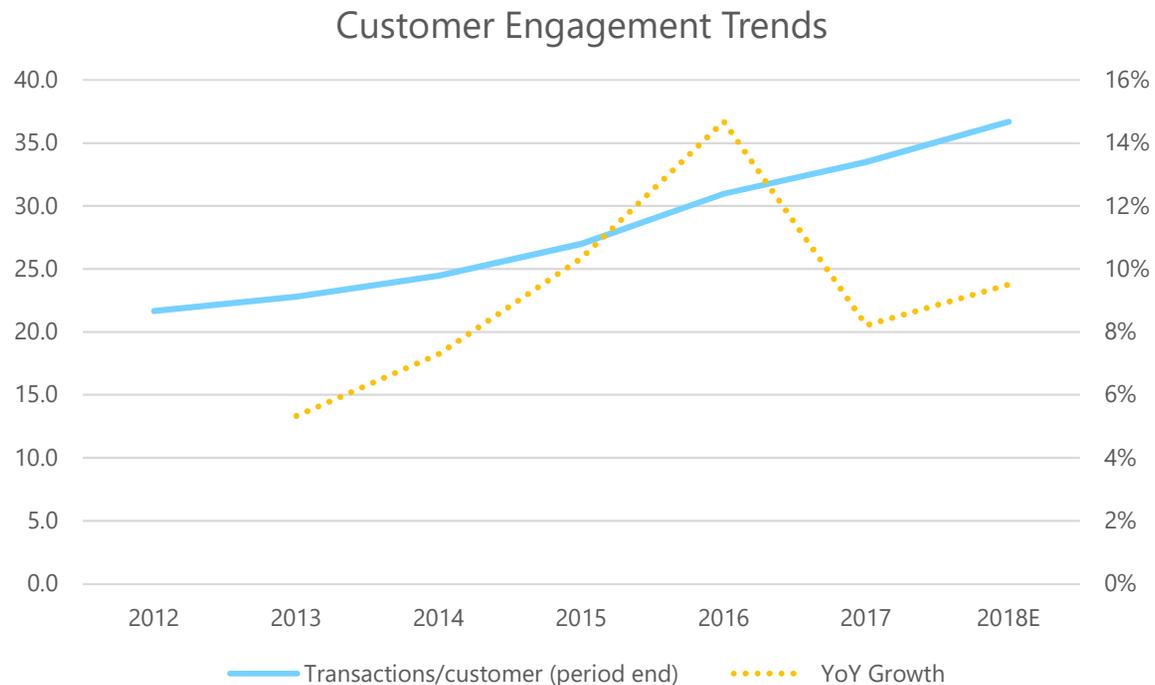
# Beneficiary #1 of the New Strategy: Active User Growth

- “So not luckily, because we had done a lot of data on this, but right away, what we saw is that customers started spending more, engagement went up, churn went down, net new actives started booming.” – Dan Schulman at RBC 11/13/2018.
- There remain ample levers to drive further new user growth between issuers incentivizing the PayPal wallet and credit card reward program liquidity



# Beneficiary #2 of the New Strategy: Engagement

- In 2012, the typical active user at PayPal used the service once every 2.4 weeks, or less than 2x/month. In 2018, the typical user will engage about once 1.5 weeks, or a little more than 3x a month.

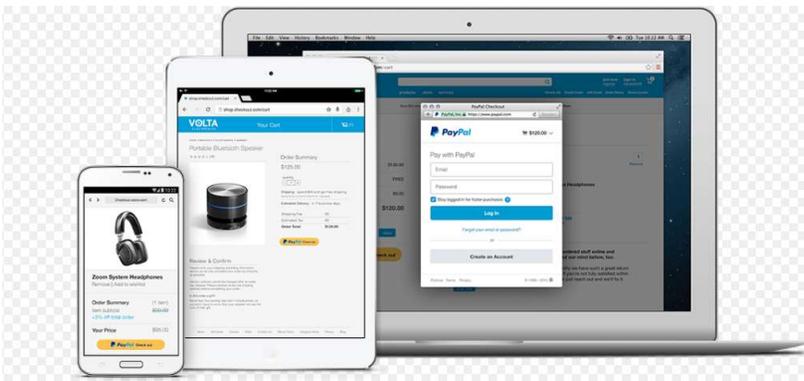


# Engagement is THE key

- You can simplify the entire thesis down to the direction of engagement!
- The average user thinks about the company more >3x as frequently on a monthly basis as they did five years ago. This increase in mindshare is important for how it influences the network effects operating within the business and forges a moat that will be impenetrable for the long run.
- Engagement is the purest measure of the value active users are getting from PayPal. When engagement is rising, PayPal's users are expressing the fact that PayPal's service is more valuable and more useful to them.
- The more frequently the average customer uses PayPal, the more valuable accepting PayPal becomes to the merchant side of the network. More engagement thus leads to more merchant uptake & more opportunities for users to engage.
- The more value each user gets out of PayPal, the more people who don't yet use PayPal end up seeing reasons to engage with the company. P2P helps here. Users thus become PayPal's biggest promoters.

# PayPal Button and One Touch

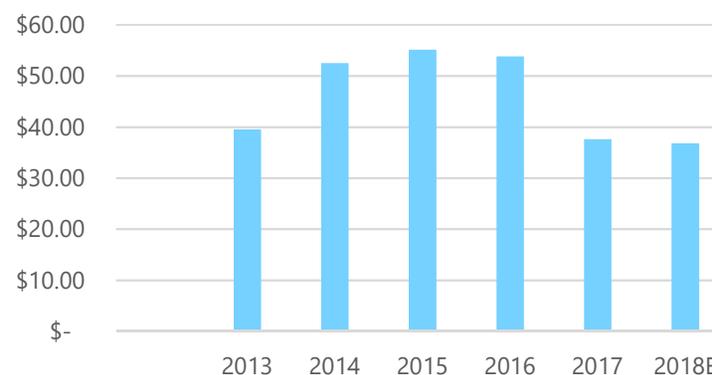
- “We’re in the business of selling conversion to merchants, and we can do that by having a 2-sided network, bringing 250 million-some-odd customers to a merchant’s website with a PayPal branded button.” CFO John Rainey at Deutsche Bank Tech Conference 9/13/2018.
- One Touch has leveled the playing field in ecommerce between Amazon and everyone else.
- PayPal’s most valuable revenue stream comes from the “Checkout Button” across sites.
- The tech stack powering this all is open enables the commercialization of Venmo without requiring incremental resources.



## 2x the engagement = 3.5x the LTV

- New actives are an important driver of top line growth & economic profit long-term & customer acquisition costs have now fallen 2 years in a row.
- Growth in customer engagement is more valuable and higher margin than growth in new actives. New actives require customer acquisition cost, whereas increasing engagement from existing customers has no such cost against it.
- These both will flow through to higher margins down the line.

S&M per net new user



	Today/Average Engagement	Double the Engagement
Transactions/customer	36.7	73.4
Dollars/transaction	60.66	60.66
Spend/year/customer	2226.22	4452.44
Revenue/active @ 2.38% take rate	52.98	105.97
Gross Margin / Customer 51.5%	27.29	54.57
(-) other costs	13	13
Taxes @ 25%	3.25	3.25
Post-tax profit	11.04	38.32
Customer Life (years)	10	10
Present Value of Pre-CAC profits	110.37	383.24
CAC	37.6	37.6
LTV:CAC	2.94	10.19
NPV @ 9% Discount Rate	\$33.23	\$208.35
IRR	27%	102%

# KPIs add up to accelerating top line

Our June 2015 expectations (right)

Vs.

Actual results & forecast below

In \$mm	2012	2013	2014	2015	2016	2017	2018	2019	2020
Active customer accounts	123	143	162	181	203	228	255	285	320
Growth in active customer accounts		16.3%	13.3%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Transactions per customer account	22	23	24	26	28	30	32	35	37
Growth in transactions per customer account		5.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
Number of payment transactions	2,663	3,261	3,964	4,764	5,725	6,880	8,268	9,937	11,942
Dollars per transaction	56	57	59	62	64	67	69	72	75
Change in dollars per transaction		1.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
<b>Total payment volume (TPV)</b>	<b>\$ 150,066</b>	<b>\$ 185,606</b>	<b>\$ 234,635</b>	<b>\$ 293,246</b>	<b>\$ 366,499</b>	<b>\$ 458,049</b>	<b>\$ 572,469</b>	<b>\$ 715,471</b>	<b>\$ 894,194</b>
Transaction Revenues	\$ 5,028	\$ 5,992	\$ 7,107	\$ 8,334	\$ 9,772	\$ 11,459	\$ 13,437	\$ 15,756	\$ 18,476
Growth in Transaction Revs		19.2%	18.6%	17.3%	17.3%	17.3%	17.3%	17.3%	17.3%
Revenue per active customer account	\$ 41	\$ 42	\$ 44	\$ 46	\$ 48	\$ 50	\$ 53	\$ 55	\$ 58
<b>Transaction revenue (%) of TPV</b>	<b>3.4%</b>	<b>3.2%</b>	<b>3.0%</b>	<b>2.8%</b>	<b>2.7%</b>	<b>2.5%</b>	<b>2.3%</b>	<b>2.2%</b>	<b>2.1%</b>
Change in revenue (%) of TPV		-3.6%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%	-6.2%
Value-added Revenues	\$ 634	\$ 735	\$ 918	\$ 1,105	\$ 1,331	\$ 1,603	\$ 1,930	\$ 2,324	\$ 2,798
% change		15.9%	24.9%	20.4%	20.4%	20.4%	20.4%	20.4%	20.4%
<b>Total Revenues</b>	<b>\$ 5,662</b>	<b>\$ 6,727</b>	<b>\$ 8,025</b>	<b>\$ 9,439</b>	<b>\$ 11,103</b>	<b>\$ 13,062</b>	<b>\$ 15,367</b>	<b>\$ 18,080</b>	<b>\$ 21,274</b>
Growth rate		18.8%	19.3%	17.6%	17.6%	17.6%	17.6%	17.7%	17.7%

in \$mm	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Active customer accounts	123	143	162	179	197	227	262	301	347	398	456
Growth in active customer accounts		16.3%	13.3%	10.5%	10.1%	15.2%	15.2%	15.2%	15.0%	14.8%	14.6%
Transactions per customer account	22	25	26	28	32	36	39	43	47	52	57
Growth in transactions per customer account		13.2%	6.0%	9.1%	14.5%	10.6%	9.5%	9.7%	9.7%	9.7%	9.7%
Number of payment transactions	2,663	3,261	3,964	4,833	6,100	7,606	9,597	12,131	15,320	19,314	24,306
Dollars per transaction	56	57	59	58	58	59	61	62	63	64	66
Change in dollars/transaction		1.0%	4.0%	-1.5%	-0.5%	2.2%	2.2%	2.0%	2.0%	2.0%	2.0%
<b>Total payment volume (TPV)</b>	<b>150,066</b>	<b>185,606</b>	<b>234,635</b>	<b>281,764</b>	<b>354,000</b>	<b>451,265</b>	<b>582,113</b>	<b>750,540</b>	<b>966,799</b>	<b>1,243,209</b>	<b>1,595,864</b>
Transaction revenues	5,028	5,992	7,107	8,128	9,490	11,402	13,863	16,846	20,452	24,788	29,990
Growth in transaction revenues		19.2%	18.6%	14.4%	16.8%	20.1%	21.6%	21.5%	21.4%	21.2%	21.0%
Revenue per active customer account	41	42	44	45	48	50	53	56	59	62	66
<b>Transaction revenue (%) of TPV</b>	<b>3.35%</b>	<b>3.23%</b>	<b>3.03%</b>	<b>2.88%</b>	<b>2.68%</b>	<b>2.53%</b>	<b>2.38%</b>	<b>2.24%</b>	<b>2.12%</b>	<b>1.99%</b>	<b>1.88%</b>
Change in revenue (%) of TPV		-3.6%	-6.2%	-4.8%	-7.1%	-5.7%	-5.7%	-5.7%	-5.7%	-5.7%	-5.7%
Value-added revenues	634	735	918	1,120	1,352	1,692	1,607	1,752	2,067	2,440	2,879
% change		15.9%	24.9%	22.0%	20.7%	25.1%	-5.0%	9.0%	18.0%	18.0%	18.0%
<b>Total Revenues</b>	<b>5,662</b>	<b>6,727</b>	<b>8,025</b>	<b>9,240</b>	<b>10,842</b>	<b>13,094</b>	<b>15,470</b>	<b>18,598</b>	<b>22,520</b>	<b>27,227</b>	<b>32,869</b>
Growth rate		18.8%	19.3%	15.1%	17.3%	20.8%	18.1%	20.2%	21.1%	20.9%	20.7%



## Pulling it together into a true Compounder

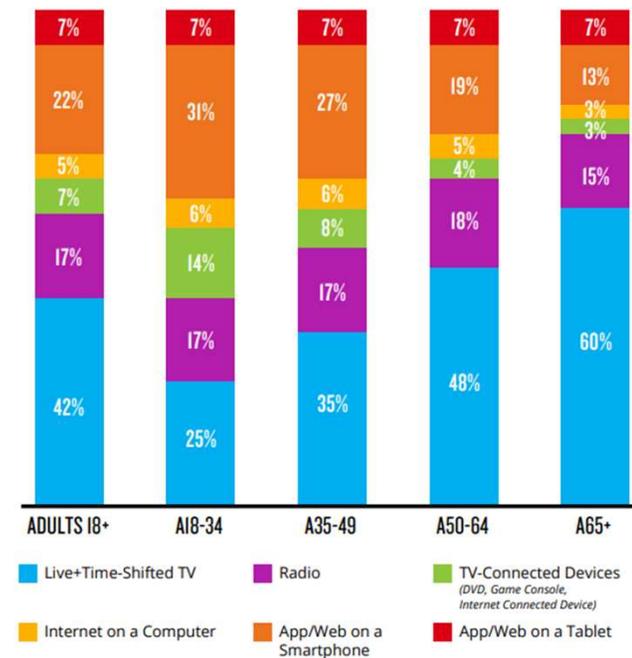
- Venmo gets a lot of talk and is an important upside driver, but the core bull case does not even need it! Let Venmo be gravy on top.
- The improving user economics put PayPal today at a position to seriously drive operating margin leverage. Wall Street is yet to buy into margin leverage, but it's coming.
- Shift to capital lean w/ the sale of the consumer credit to business Synchrony and a path to balance sheet optimization enhance the ROIC & ROE of the business.
- DCF using our revenue assumptions in the previous slide and operating margin leverage kicking 400 bps of EBIT margin leverage over 5 years + ~\$6.40 net cash per share and a 9% WACC support a price of \$150.
- If the DCF seems too ambitious, you have a capital lean, 4% FCF yield growing at a rate greater than the high teens top line (base case 20%), further supported by repurchases.

# Full Stream Ahead with Roku

“10% of the 18 to 34 year olds watch their television on a Roku”

– Anthony Wood, CEO of ROKU

Q2 2018 SHARE OF DAILY TIME SPENT BY PLATFORM  
BASED ON TOTAL U.S. POPULATION



## Brief History

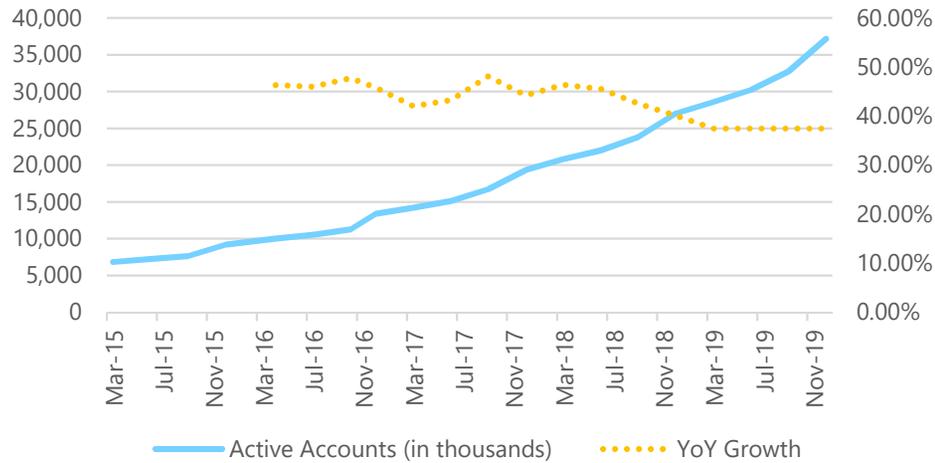
- 1997-Anthony Wood founded Replay TV, an early TiVo competitor in the DVR space, whose successor company is now owned by DirectTV
- October 2002 - Wood used the proceeds to found Roku, while taking a job at Netflix. Roku means "six" in Japanese, for it is Wood's 6<sup>th</sup> company.
- April 2007 – Wood is hired by Netflix as "VP of Internet TV"
- May 2008 – "The Netflix Player by Roku" is launched as the first dedicated TV-connected streaming device
- October 2008 – Roku raises a venture round from Menlo Ventures
- 2009 – Amazon Video is added, 2011 HBO GO is added
- October 2014 – Fox and Sky invest in Roku
- September 2017 – Roku IPOs
- October 2017 - The Roku Channel is launched
- Q1 2018 – "Platform" revenues exceed "player revenues"

# It's a Platform, not a hardware company!

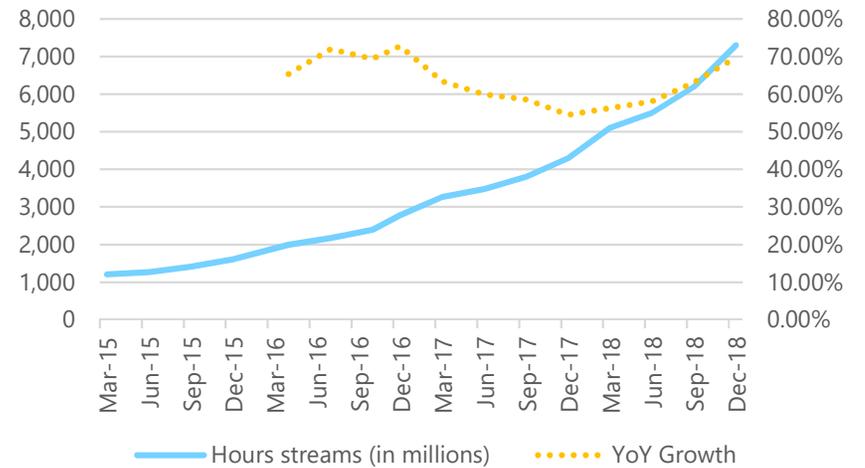
- The company strategically views Player sales as a means to drive placement of the Platform
- Once a streaming device (whether a stick or increasingly a TV itself) is placed in a household, the company then seeks to monetize an account
  - Subscription and Video-on-Demand (VOD) purchase royalties (1/3rd of Platform revenues)
  - Advertisements (2/3rds of platform revenues and growing quicker than the combined segment).
    - Audience building
    - AVOD
- Once a household has an "Active Account" on Roku, the Platform side has several levers enhancing monetization
  1. With a growing abundance of streamable content, hours streamed continues to grow.
  2. Roku can "fill" more of the available inventory on the platform.
  3. Roku can drive better CPMs (cost per mil/thousand impressions) augmenting advertising inventory with its growing trove of user data.

# And the platform is growing fast!

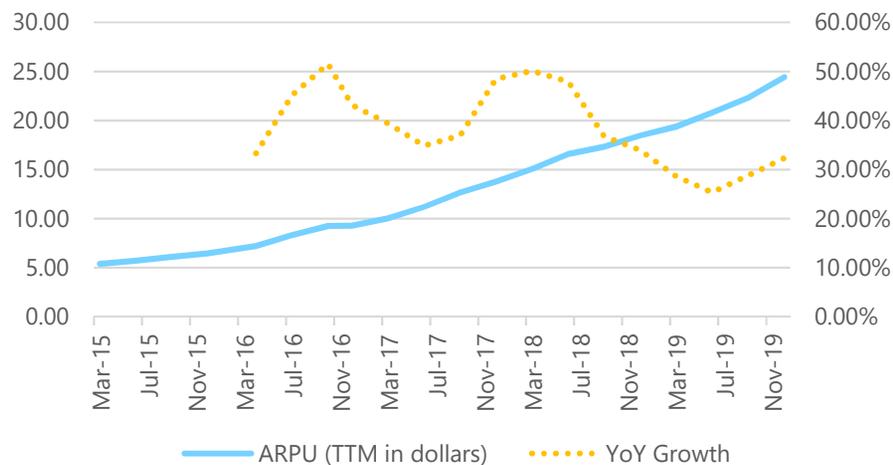
## Active Accounts by Quarter



## Hours Streamed by Quarter



## ARPU by Q



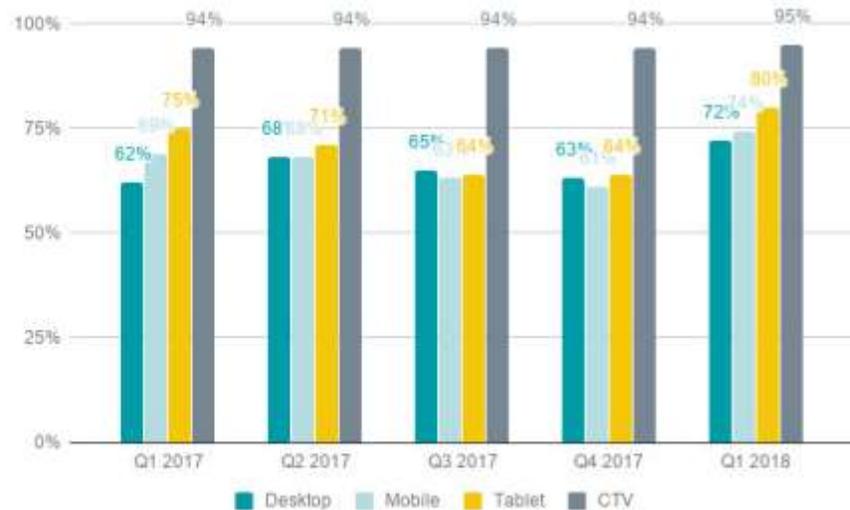
# Telling the Complete Story to Advertisers

- Roku/CTV boasts ~95% completion rates which compares favorably to all other media
- Roku was early to identify the demand for streaming free content, supported by ads when most of the industry was focused on subscriptions. This has given Roku a headstart in building a tech stack & reaching scale.
- It is estimated that “87% of ad requests” on CTV happen on Roku<sup>1</sup>

## VCR by Device

VCR for all device types increased in Q1 2018 beyond levels seen in all quarters of 2017. Even desktop, which declined from Q2 to both Q3 and Q4, rose beyond its 2017 height in Q1 2018.

CTV numbers are consistently high because viewers tend to be committed to the content they've chosen to watch and they don't have an option to skip the ads. Completion rate for CTV rose from a steady 94% throughout 2017 to 95% in Q1 2018.



CTV = Connected TV, e.g., Roku, Apple TV, Playstation and Amazon Firestick

<https://www.iab.com/wp-content/uploads/2018/06/extreme-reach-video-benchmarks-2018q1.0079873a72f3.pdf>

<https://www.broadcastingcable.com/news/demand-for-connected-tv-ads-jumped-in-last-year>



## Building a Walled Garden on TV

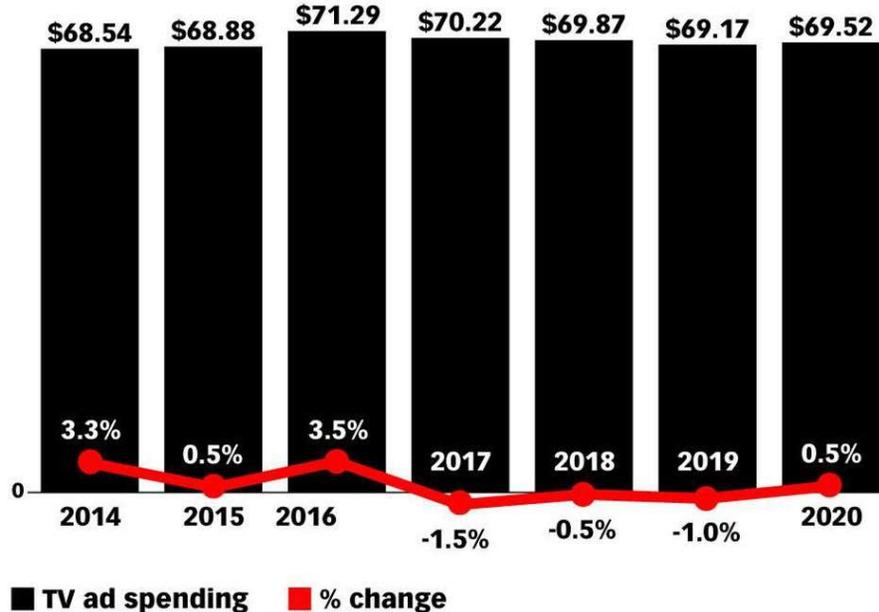
- The enhancement to the user experience offered by lower ad loads makes the ads themselves more valuable. Roku tastefully inserts ads at approximately 1/4th the industry average ad load (4 minutes of advertising per hour on Roku vs 16 minutes on linear)
- “We've been very effective at showing...[advertisers] the ROI math, that the last dollar that they put in the linear TV is reaching a smaller and smaller base, and that if they move that dollar to Roku, it's going to deliver much more reach and ROI....[T]hinking about our advantages as an ad platform, the reason advertisers come to us in the first place is we're an ad-scale platform with the largest, most engaged user base. It's a unique audience that can only be reached on Roku. We've got that direct consumer relationship and all of the data that flows from it. And ultimately, it's ads that work.” – Scott Rosenberg, Q3 2018 earnings call.
- While Roku can't monetize certain publisher inventory, they now restrict access to IP address. For targeting, publishers who control their own ad supply now must pay a licensing fee to Roku to access the CTV benefit.

# The TAM on the ad side

- Advertising on digital platforms will grow nearly 19% in 2018.
- Advertising on the Roku platform will double to nearly \$300m.
- Inevitably most TV will be consumed through one of the digital platforms.
- Two clear leaders are emerging: Roku and Amazon.

## US TV Ad Spending, 2014-2020

billions and % change



Note: excludes digital

Source: eMarketer, March 2018

236231

www.eMarketer.com

<https://www.forbes.com/sites/danafeldman/2018/03/28/u-s-tv-ad-spend-drops-as-digital-ad-spend-climbs-to-107b-in-2018/#5f89ba317aa6>



# The TAM on the household side

- The future of TV is connected, though as of today, just slightly more than 1/3rd of the U.S. adult population is reachable on “internet connected devices.” <sup>1</sup>
- At the end of 2017, there were approximately 126.22 million households in the US. Since Roku measures Active Accounts in terms of households, not devices, this is the relevant addressable market metric.
- ~~24+~~ 27 million households already onboard
- A focus on Active Accounts under-states how many devices Roku has actually placed. The move from one to two and more devices per household are an important driver for hours viewed and overall monetization.



1- <https://www.nielsen.com/us/en/insights/reports/2018/q2-2018-total-audience-report.html>

# Roku's Edge vs. the Competition

- First mover advantage with ~~24~~+ 27 million households already onboard
- Streaming is the company's essence, it is the "end" not a means to an end
- Platform openness—there are no rivals excluded from the platform as Amazon and Google have done to one another with Prime & YouTube respectively.
- A unique combination of speed, quality, simplicity, cheapness and abundance of choice. Other portals check 2-4 boxes, only Roku checks all 5!
- The Roku offering is a favorite at large retailers like Costco and Walmart, who target a core Roku user demographics and have reason to fear further fueling Amazon's ambitions.

# TV Manufacturers as another pillar of “edge”

- “So for example, so what’s better about Roku software? Well, a big one is that phones are expensive, like they cost a lot of money, they’re super computers. TVs are cheap, the main board on a TV is \$25 and TVs are brutally cost competitive, no one makes money in the TV business. So our software runs on low-cost TVs, it costs less to build a TV with Roku software. When you’re trying to get 50 cents off your bill of materials so you can win a Black Friday special at Walmart, the amount of money you save by cutting your RAM in half and your CPU in half by running Roku software — which actually has great performance and more content — is huge. It’s the difference between getting distribution and not getting distribution in Walmart.” – Anthony Wood



<https://www.recode.net/2018/9/13/17852908/roku-anthony-wood-apple-google-amazon-tv-competition-peter-kafka-media-podcast>

## Placing the Hardware

- Roku places an actual piece of hardware in a house, increasingly in the form of a TV. The churn with the platform is thus inherently low.
- 1 in 4 TVs sold today are Roku (per the company's calls). This is supported by TCL's ascendancy from 24<sup>th</sup> in US TV marketshare to #3 in 2018. This was driven almost entirely by Roku.
- The Washington Post recently called a Roku-powered TCL TV "the best deal on a premium TV I've ever seen" when comparing it to a high-end Samsung. Notably the TCL costs \$600 while the Samsung costs \$1,299!!!<sub>1</sub>
- Roku has room to lower the price on hardware; however, they are already priced lower than competitors and treat it as a form of "commitment" from purchasers to use it. This is similar to how a Costco or Amazon Prime membership works.
- In contrast to subscription offerings, the "churn" in building up lifetime values for Roku users is far lower and different in nature.

[https://www.washingtonpost.com/news/the-switch/wp/2018/06/08/this-tv-youve-never-heard-of-is-the-best-tv-deal-weve-ever-seen/?utm\\_term=.874ecb7ae84c](https://www.washingtonpost.com/news/the-switch/wp/2018/06/08/this-tv-youve-never-heard-of-is-the-best-tv-deal-weve-ever-seen/?utm_term=.874ecb7ae84c)



# The Roku Channel

- The Roku Channel (TRC) itself is becoming a key driver of value.
- TRC was first launched in October 2017 and is already one of the top 5 most watched apps on Roku.
- Originally, TRC was solely available on Roku itself, but now the company has a distribution agreement with Samsung covering their smart TVs (perhaps a precursor of a bigger agreement?!?!), has enabled web-based login and the forthcoming ability to stream from the Roku mobile app.
- These changes have untethered TRC from the Roku hardware and unleashed TRC as a streaming asset with universal availability.
- The increased engagement with TRC has driven ad revenue growth which has empowered Roku's ability to acquire more desirable content.
- There are also signs Roku will use TRC as a home screen and a modern aggregator/bundler of content. Roku started the New Year by announcing the availability of subscription content within TRC that will be payable all via one simple, monthly bill

# The Unit Economics

At the end of 2019 we expect unit economics to look like the following:

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
ARPU		20.97	25.62	30.01	33.65	37.69
Gross Profit/user		12.80	14.86	17.10	18.84	21.11
-R&D / user (@ 1/2 instance assuming 1/2 is "growth investment", no leverage to maintenance side over time)		2.78	2.78	2.78	2.78	2.78
-G&A/user		2.75	2.55	2.35	2.15	2.15
+D&A / user		0.40	0.40	0.40	0.40	0.40
FCF / year / user	-6.43	7.68	9.93	12.38	14.32	16.04
FCF / year / user margin %		36.60%	38.77%	41.25%	42.55%	42.55%
LTV / user Yr1 @ 8% discount rate		\$46.88				
LTV/CAC ratio		7.29				
LTV x 2019 year-end active accts		\$1,741.77				
IRR		140.36%				

- If Roku can get to 40 million Active Accounts (32% penetration of US households, leaving aside the international opportunity for now) and an ARPU of \$25 by 2020, the company can hit \$1 billion in platform sales (approximately 48% growth for Active Accounts and 50% growth for APRU over expected 2018 final results, both implying a fairly large slowdown from present trends).



# \$1b in Platform Sales & What it Means

- Assume no value or margin for the Player business
- Use 2019s starting market cap of \$3b and think about what the 3x P/S means.
- $P/S = \text{net margin} * \text{payout ratio} * (1+g) / (r-g)$ . Using 10% for WACC and 4% or 5% for growth, you get an implied net margin at maturity of 17.3% or 14.3% respectively.
- Handicapping the future, for Roku to be a bargain here you need any 1 of the following:
  1. Greater than 40m households long-term
  2. Greater than \$25 ARPU
  3. Greater than a 20% net margin
  4. Growth above terminal rate in 2020 and beyond
- It's likely Roku exceeds each of these hurdles, not just one of them.

# Relatively Speaking

- Roku's most important multiple: EV/GP is more favorable than a peer group that includes small & large cap platforms.
- Roku's growth outlook is far superior.

Ticker	EV	2018E GP	2019E GP	2020E GP	2018E EV/ GP	2019E EV/GP	2020E EV/GP	2 Year Expected GP Growth
GOOG	638,954	77,761	92,461	108,262	8.22x	6.91x	5.90x	39.22%
NFLX	139,810	6,252	8,016	10,322	22.36x	17.44x	13.54x	65.10%
SQ	25,218	864	1,240	1,701	29.19x	20.34x	14.83x	96.88%
SHOP	14,314	590	832	1,114	24.27x	17.20x	12.85x	88.85%
FB	361,110	46,114	55,265	66,240	7.83x	6.53x	5.45x	43.64%
YELP	2,088	886	986	1,102	2.36x	2.12x	1.89x	24.38%
GRUB	7,157	566	735	935	12.64x	9.74x	7.65x	65.19%
TWTR	20,462	2,079	2,403	2,724	9.84x	8.52x	7.51x	31.02%
Average					14.59x	11.10x	8.70x	56.79%
Median					11.24x	9.13x	7.58x	54.37%
<b>ROKU</b>	<b>4,108</b>	<b>328</b>	<b>465</b>	<b>646</b>	<b>12.52x</b>	<b>8.83x</b>	<b>6.36x</b>	<b>96.95%</b>

\*\*all numbers from Bloomberg, market data & consensus estimates as of 1/8/2019

# Strategically Speaking

- Look at an asset like Hulu. Disney, has every reason to downplay the value of Hulu as it seeks to acquire the 40% it does not own. Yet Hulu and its 25 million users was valued at \$9.26 billion.<sup>1</sup>
- We don't know ARPU or churn at Hulu, though it's reasonable to expect both to be considerably higher than at ROKU. Since Roku places an actual piece of hardware in a house, increasingly in the form of a TV, the churn associated with the platform is inherently lower.
- Hulu has widening losses, expected to reach over \$1 billion in 2018, with content costs upwards of \$2.5 billion.<sup>2</sup> Hulu did just boast \$1.5b in ad revenues, which is decently more than Roku on a similar userbase. This gives a good sense of where Roku itself could go.<sup>3</sup>
- Hulu vs Roku isn't a perfect comparison, but Disney's valuation is a good reference point to think about. Roku would have immense strategic value to a host of different industry players in content & distribution, much as Hulu does to its owners.

1- <https://deadline.com/2018/11/disney-values-hulu-at-9-3-billion-1202506231/>

2- <https://www.thewrap.com/hulu-on-track-to-lose-1-5-billion-in-2018/>

3- <https://variety.com/2019/digital/news/hulu-25-million-subscribers-2018-ad-revenue-1203102356/>

## Looking ahead

- Looking ahead, the primary driver of returns will be Roku's delivery of exceptional top-line growth. There is also a path to multiple expansion (P/S) as the market comes to appreciate the company's uniquely advantaged business model, scale and free cash flow generation ability on a recurring style of revenue base.
- What multiple would you put on this kind of high margin, capital lean, highly recurring revenue base?

		2022 Avg Actives				
		57.7	62.7	67.7	72.7	77.7
2022 ARPU	52.32	3,018,864	3,280,464	3,542,064	3,803,664	4,065,264
	48.32	2,788,064	3,029,664	3,271,264	3,512,864	3,754,464
	44.32	2,557,264	2,778,864	3,000,464	3,222,064	3,443,664
	40.32	2,326,464	2,528,064	2,729,664	2,931,264	3,132,864
	36.32	2,095,664	2,277,264	2,458,864	2,640,464	2,822,064

**PayPal Holdings, Inc. (NASDAQ: PYPL)  
and  
Roku, Inc. (NASDAQ: ROKU)**

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