



Snapchat

IAG Battle Pitch | **Short**

Jaro van Diepen

Mateo Panjol-Tuflija

Michael Giese

Oliver Jiang

Sruthi Boddu

Short Thesis Team



Mateo Panjol-Tuflija
Portfolio Manager



Sruthi Boddu
VP; Senior Analyst



Michael Giese
Senior Analyst



Oliver Jiang
Senior Analyst



Jaro van Diepen
Junior Analyst

Agenda



Industry Dynamics



Investment Theses



Catalyst



Valuation

Executive Summary: Time to Take Off the Spectacles...

The Misunderstanding:
The over extrapolation of recent user growth performance has masked the structurally indefensible business model and unfavourable headwinds

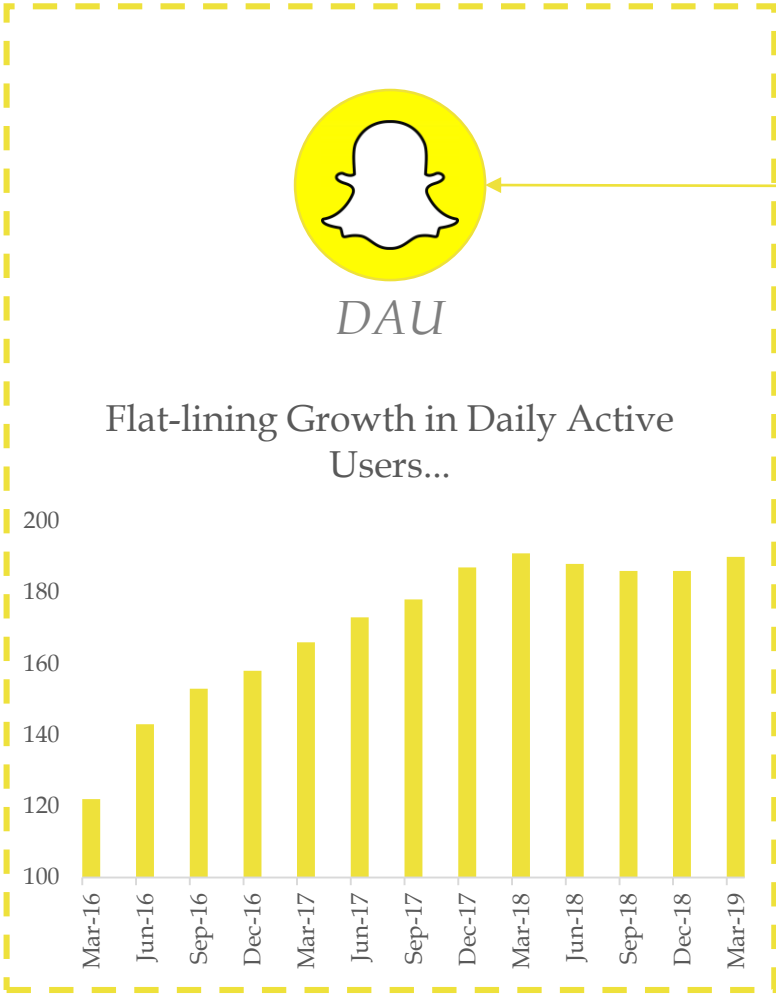


Takeaway:
Nothing has fundamentally changed to warrant a 90% YTD price increase and rationalization



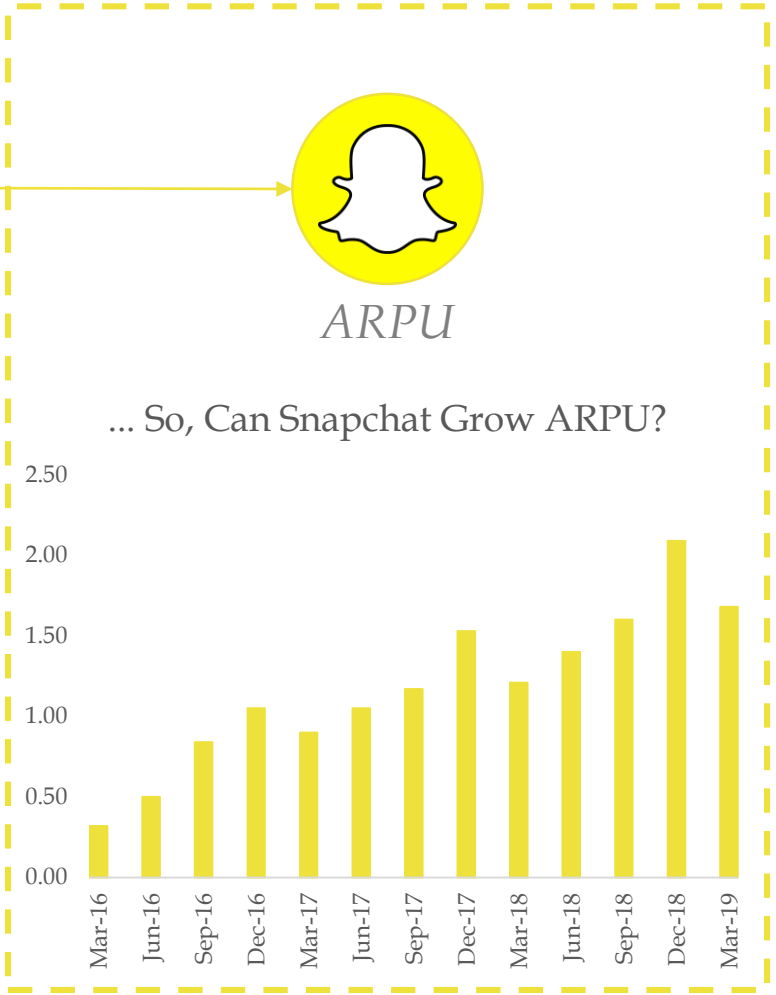
Investment Thesis I: DAU Saturation Reached

Thesis I: Why Does Growth Matter?



The Tug o' War

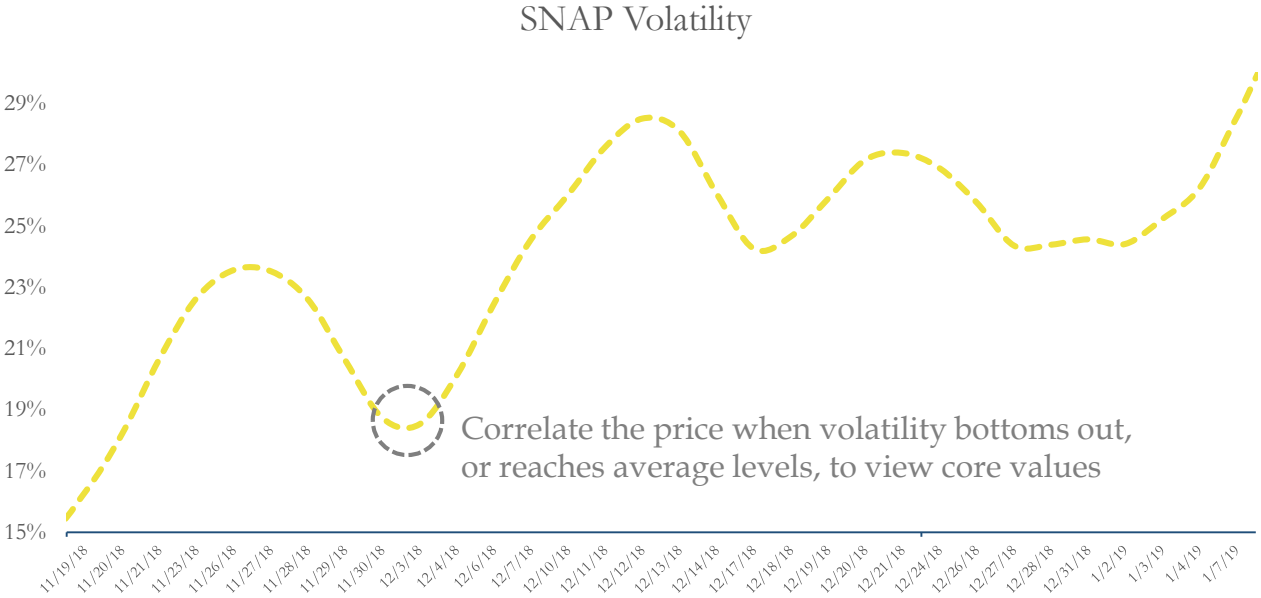
$$Revenues = DAU \times ARPU$$



Thesis I: A Relationship Most Kind: The Market and DAU

Long term the market correlates with the DAU reports

	ARPU	DAU	Price at Earnings	Lowest Volatility	Lowest Delta
ARPU	1				
DAU	0.67	1			
Price at Earnings	-0.82	-0.67	1		
Lowest Volatility	-0.63	-0.72	0.827	1	
Lowest Delta	-0.47	-0.30	0.617	0.83	1



However, something is off!

Turns out the market really appreciates DAU Acceleration

	∂^2 ARPU	∂^2 DAU	Price at Earnings	Lowest Volatility	Lowest Delta
ARPU	1				
DAU	0.64	1			
Price at Earnings	-0.32	0.21	1		
Lowest Volatility	0.30	0.50	0.83	1	
Lowest Delta	0.33	0.70	0.61	0.83	1

Thesis I: Reaching “Valuable” User Saturation

Not much room left for user growth

**92% of US 12-17
year-olds use
Snapchat**

**94% of US 18-24
year-olds use
Snapchat**

**27% of US adults use
Snapchat**

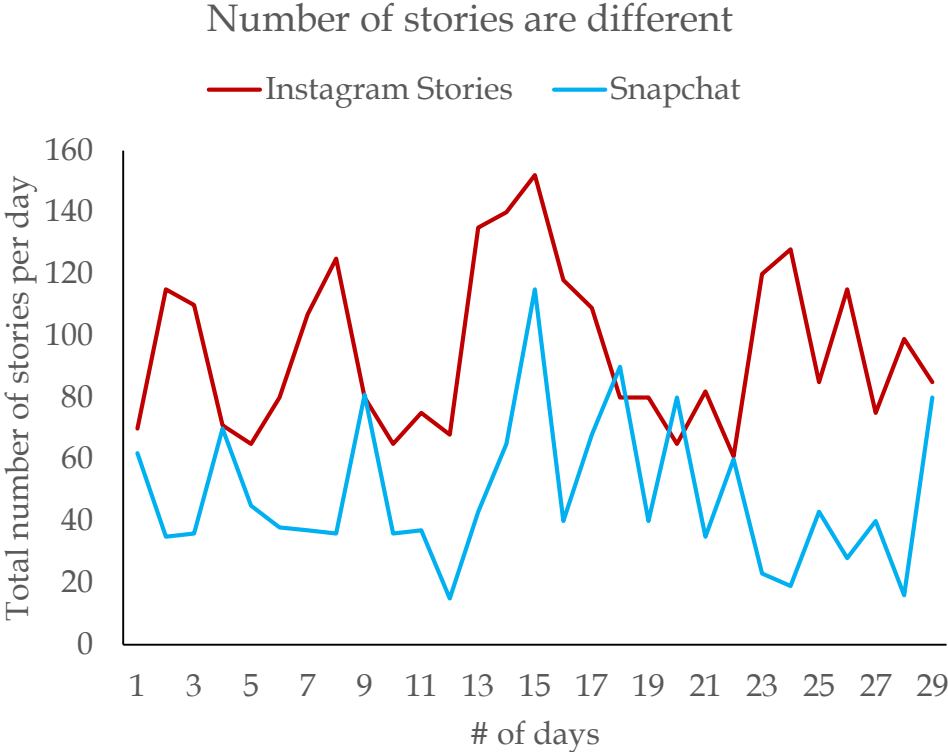
Snapchat has already penetrated at least 90% of its target market.

DAU \neq Dedicated Users

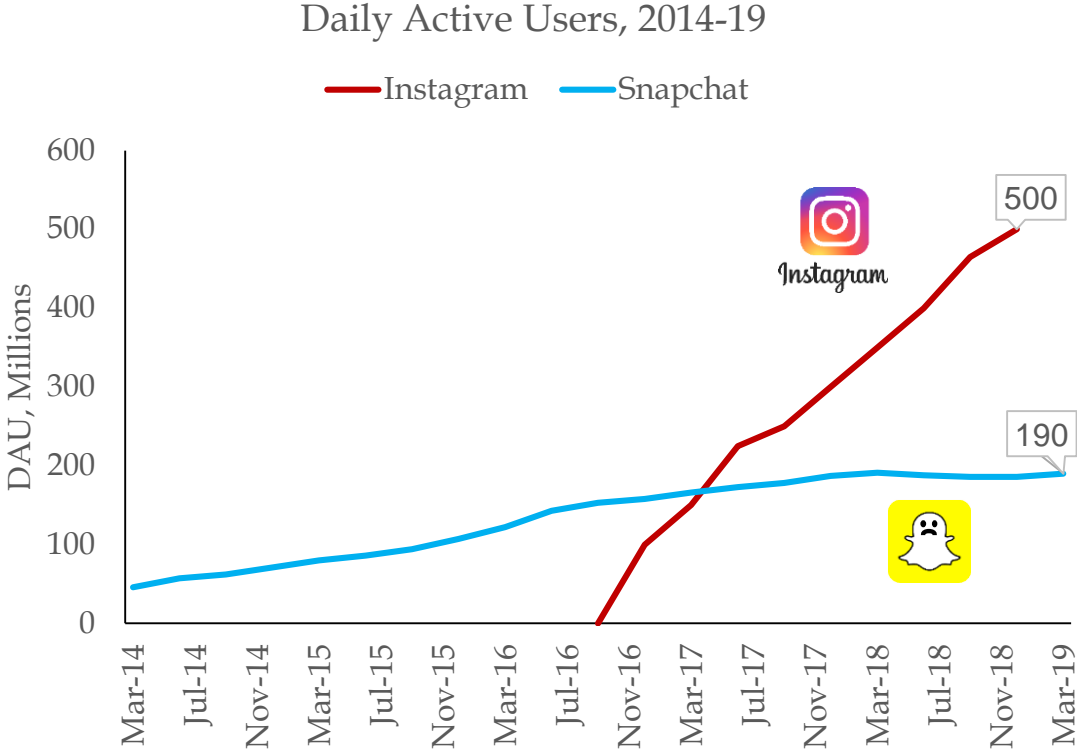
Thesis I: User retention isn't correlated with higher ARPU

Daily active users are not necessarily revenue-generating users

People are posting more Instagram stories than Snapchat stories...



...which means the number of people watching Snapchat stories is leveling off.



Thesis I: Network effects compound this trend

People will continue to switch to Instagram as their friends leave Snapchat

5 Reasons to Ditch Snapchat for Instagram, If You Haven't Already

Why I'm leaving Snapchat and so are all your friends

Young professionals say Snapchat is crap and the industry needs to move on

7 Reasons To Ditch Snapchat In Favor of Instagram Stories

Snapchat growth slowed 82% after Instagram Stories launched

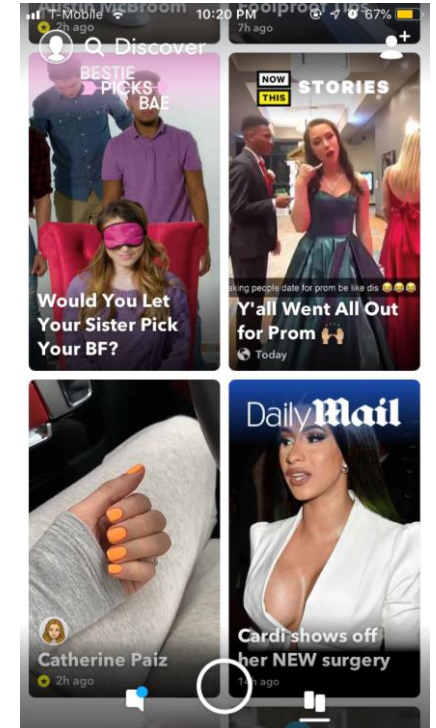
Thesis I: Network effects exacerbate the problem



More people post stories on Instagram



Less opportunities for ad-clicks on Snapchat



Discover less lucrative

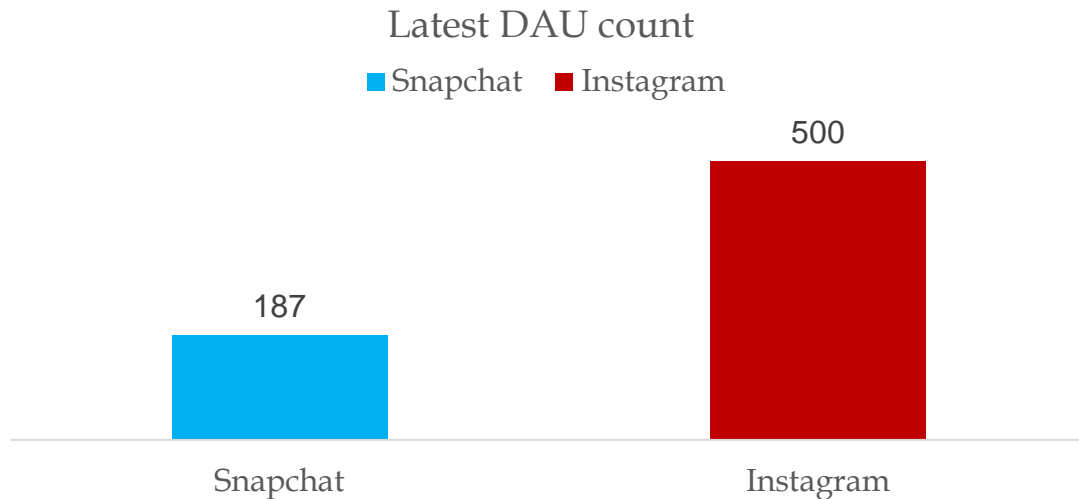
As dedicated users churn, Snapchat loses important revenue opportunities

Thesis I: Instagram is a better alternative

It is more expensive to advertise on Snapchat than on Instagram despite Instagram's better platform.

Advertising

- It is cheaper to advertise on Instagram than on Snapchat
- Instagram ads also have higher overall viewership and a higher conversion rate
- Instagram offers better analytics and targeting than Snapchat does



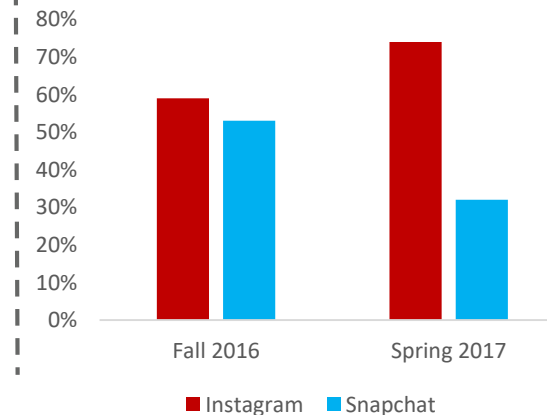
Discoverability

Instagram gives a business a public profile, and because the nature of Instagram is more public than Snapchat, so it offers a more seamless in-app shopping experience. The act of online shopping fits better with Instagram, where people try to be the best version of themselves, than Snapchat.

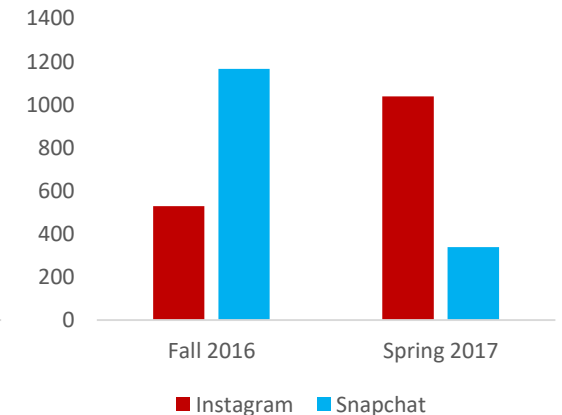
Stories adoption and posts during NYFW

N = 54 Brands tracked, 1377 posts

Brand Adoption



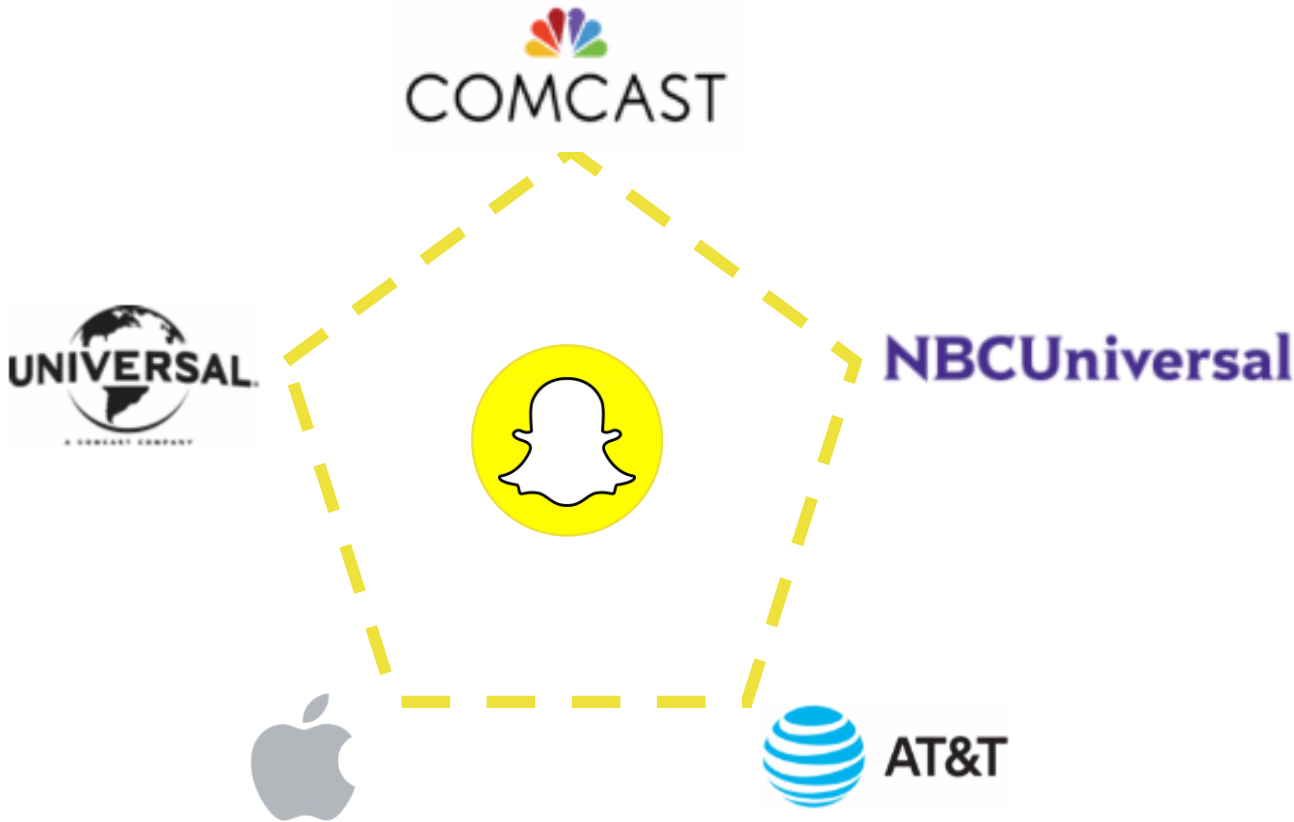
Number of Posts



Thesis I: What Happens Now?

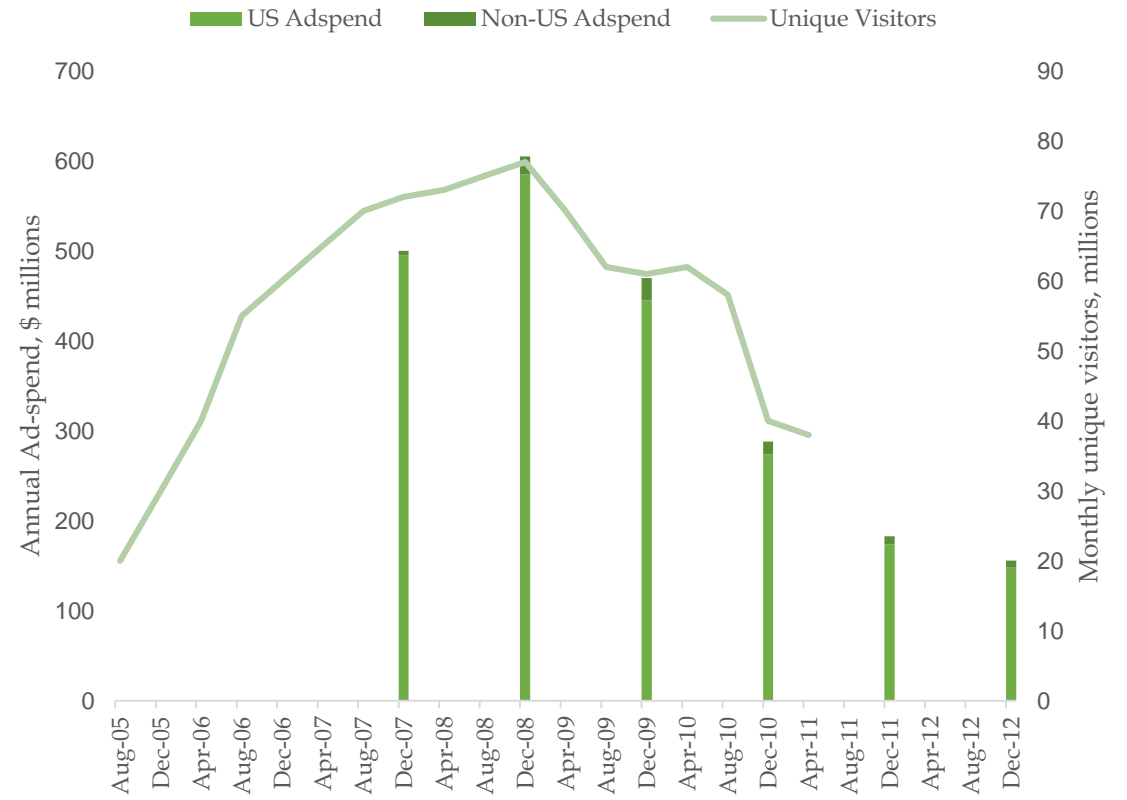
As user growth stalls, corporate advertisers will cut ties

Snapchat's biggest advertisers are large corporations.



Using MySpace as a case study, as users stop visiting Snapchat as often, these corporations will cut ties with Snapchat.

MySpace: Declining unique visitors translate to lower Ad-spend



Snap Inc.



Investment Thesis II: Unfavourable Business Model

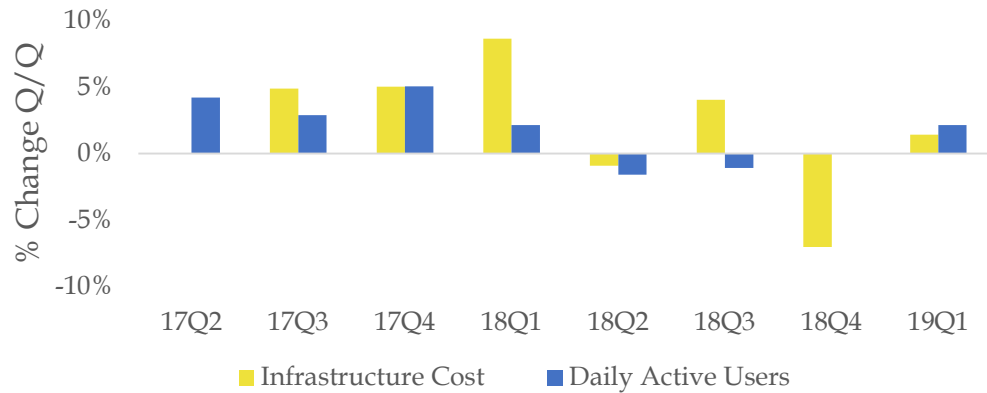
Thesis II: Unfavourable Business Model – Cost Structure

Limited opportunity to improve margins by cutting costs

Cost of Revenue

Tied down to Google and Amazon through 2022

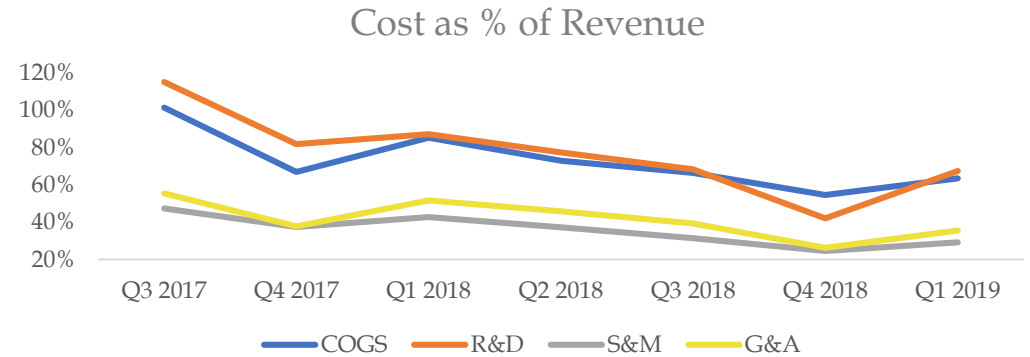
- Signed Pre-IPO commitments with both Amazon and Google to host its platform
- Contracts include minimum purchase
- Snap is guaranteed to pay 85% of the contract, even if data goes unused
- No evident relationship between DAU and infrastructure costs:



Research and Development

Instagram on copying Snapchat: "This is the way the tech industry works" - Tech Crunch, 2017

- Snapchat is essentially a free R&D pipeline for Instagram
- Must maintain its R&D expenditure to retain users
- Costs have a hit a minimum:



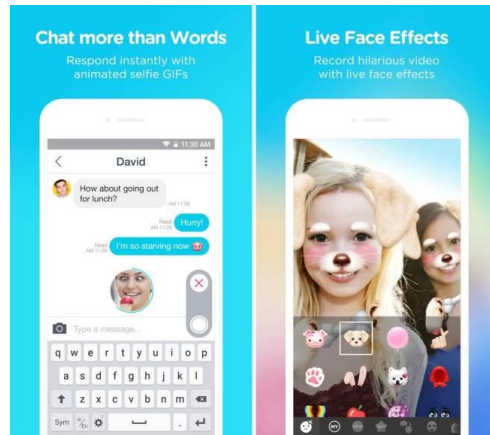
Takeaway: SNAP can only improve bottom line by increasing top line but valuable DAU have reached saturation...

Thesis II: Unfavourable Business Model – Indefensibility

Nothing proprietary about SNAPs business model makes it highly replicable

Snow = Korean SNAP

- Korean technology company Naver launched “Snow”
- Spun off in 2016
- More than 100mm downloads in two years
- Backed by Softbank and Sequoia China
- Limits SNAPs growth ambitions in Asia
- 40-50mm DAUs



Competitive Landscape

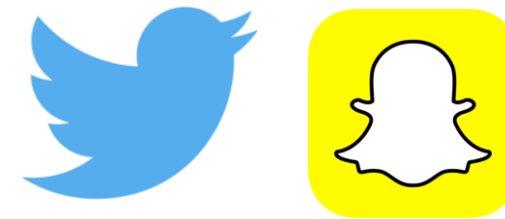
Tier 1



Tier 2



Tier 3





Investment Thesis III: Priced In M&A is Unfeasible

Thesis III: Priced In M&A Is Unfeasible

Market is pricing in potential M&A but this is unlikely occur

Why Snap will get acquired before 2020, probably by Amazon

Will Snapchat Get Snapped Up Or Snap Back?

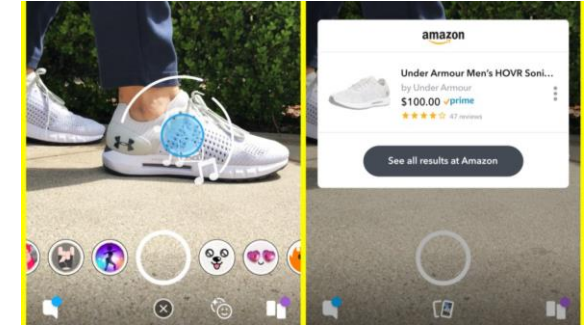
**Snap Will Keep Falling Unless
Apple Or Google Buys It, Says
Wharton Professor**

Thesis III: Priced In M&A Is Unfeasible cont.

Market is pricing in potential M&A but this is unlikely occur

Arguments For:

1. Gives Amazon access to a younger demographic
2. Only dilutes AMZN stock by 1.5%
3. Leverage information to increase SNAPs ARPU
4. Cost synergies



Arguments Against:

1. Must pay at \$143-341 per “valuable” customer
2. Customer base consists of young demographic with limited disposable income
3. At an ARPU of \$1.68, AMZN can access users cheaper through a partnership
4. Avoid SNAP’s operational risk

		Acquisition Cost Per User						
		Success Rate						
		55%	60%	65%	70%	75%	80%	85%
Customer Overlap	45%	341	312	288	268	250	234	221
	40%	312	286	264	245	229	215	202
	35%	288	264	244	227	212	198	187
	30%	268	245	227	210	196	184	173
	25%	250	229	212	196	183	172	162
	20%	234	215	198	184	172	161	152
	15%	221	202	187	173	162	152	143

Takeaway: Initially seems compelling but the numbers reveal a different story



Investment Thesis IV: Unreliable Corporate Governance

Thesis IV: Unreliable Corporate Governance

Suffers from founder syndrome; equity stake significantly exposed to the whims of the founders



Evan Spiegel
Chief Executive Officer, Co-Founder



Robert Murphy
Chief Technology Officer, Co-Founder

Voting Issues
Evan Spiegel and Robert Murphy, own or control voting shares that represent approximately 97% of the voting power of outstanding capital stock.

Short to Zero
“It’s really hard to kill a company,” the former employee said to me. “But, anything is possible when it comes to Evan Spiegel.”

Channel Check



and *apparently* Evan Spiegel has learned he’s a shit manager

shit manager and leader ** lol

Doesn’t rly trust anyone, v secretive

Even if the fundamental business is sound, other extraneous variables point to a compelling short.

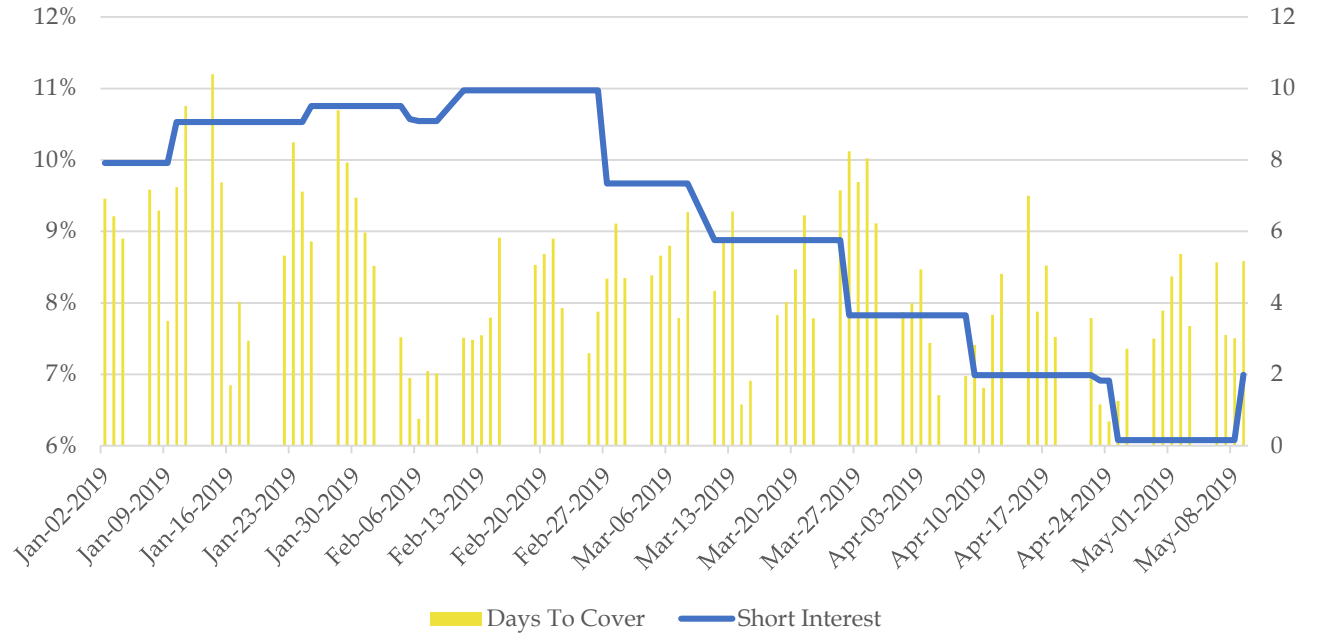
Catalyst?

Annualized cost to short SNAP has dropped from ~75% to less than 3%

Shorting Fee:
0.5%

Rebate:
1.9%

YTD SNAP Short Interest and Days to Cover



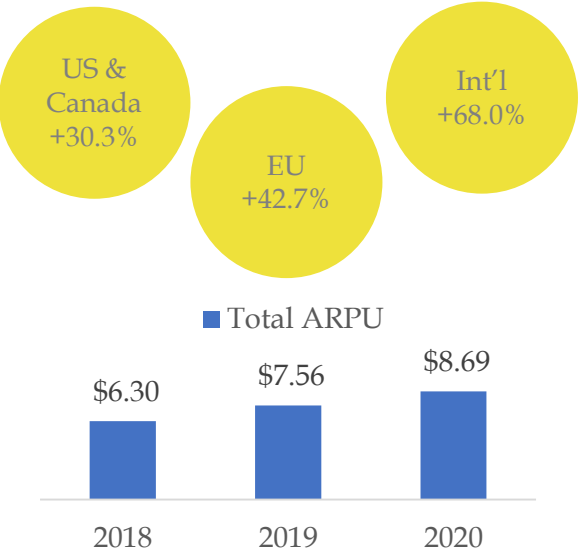
Timing is attractive relative to two years ago which decreases the need for an immediate catalyst

Valuation: Baked in to current price

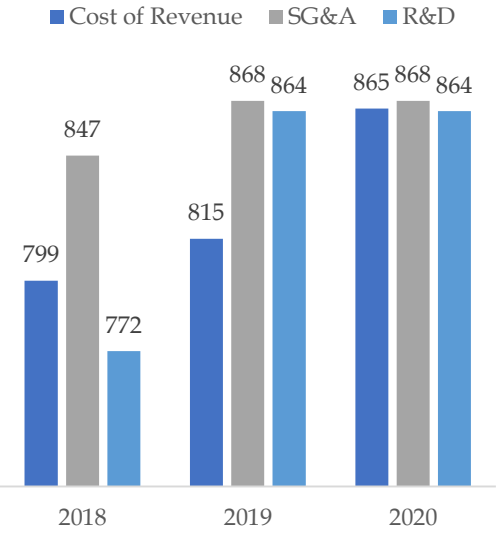
From current share price of \$10.49, back out assumptions that market has baked in.

Are these numbers realistic?

2-YR ARPU Growth: 38%



Increased costs: 7%

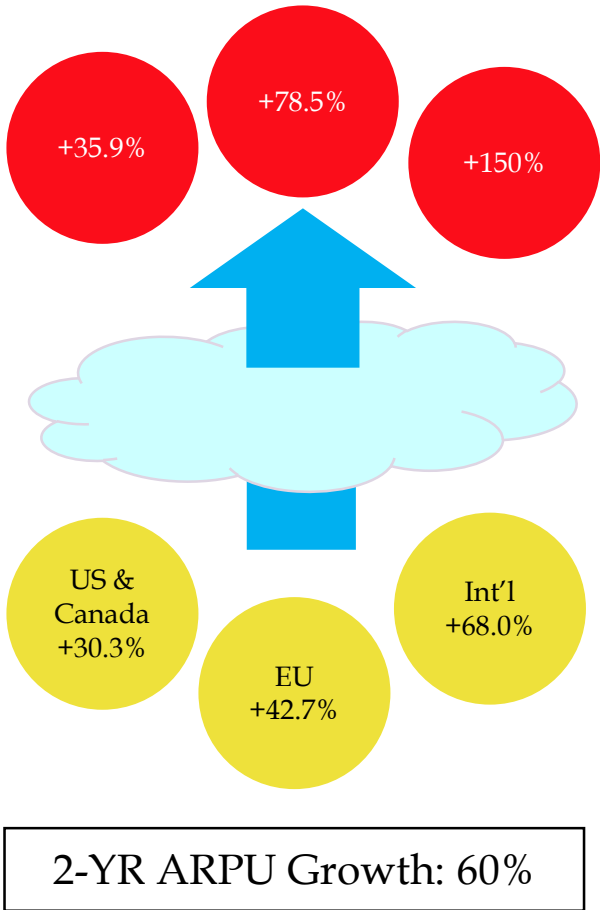


- EV/Sales: 10.0x
- WACC: 10%
- No Cap Raises
- No UI Redesign

Holding DAU constant

\$10.49

Valuation



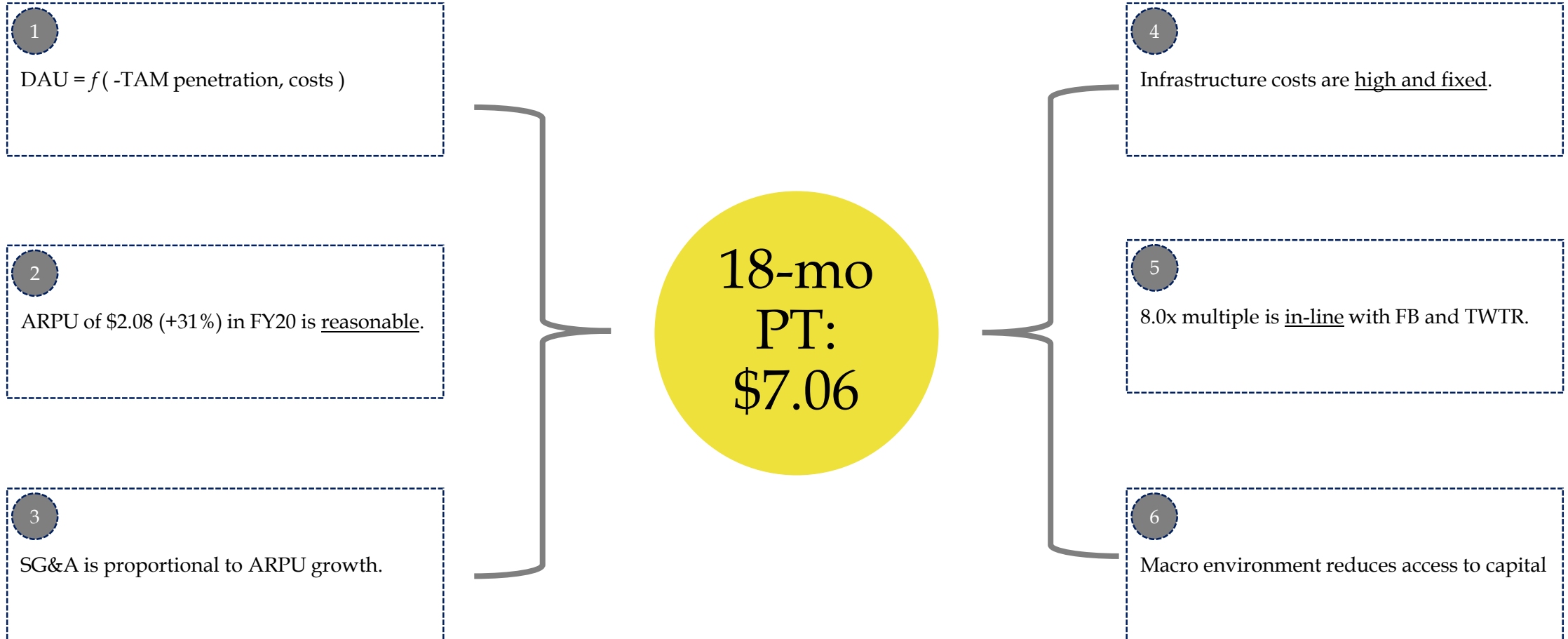
With a \$14-15 PT (and 11.6x EV/Sales), here's what the bulls are expecting:

SNAP Inc. \$, millions	Mar-18 1Q18	Jun-18 2Q18	Sep-18 3Q18	Dec-18 4Q18	FY18	Mar-19 1Q19	Jun-19 2Q19E	Sep-19 3Q19E	Dec-19 4Q19E	FY19
Revenue	230.7	262.3	297.7	389.8	1,180.50	320.4	374.0	413.4	546.7	1,654.5
Total DAUs	191	188	185	186	188	190	196	193	194	193
ARPU	1.21	1.40	1.60	2.09	\$6.30	1.69	1.91	2.14	2.81	\$8.55
North America	2.10	2.21	2.62	3.38	\$10.31	2.81	2.61	3.09	4.00	\$12.51
	16%	12%	21%	23%	19%	34%	18%	18%	18%	21%
Europe	0.53	0.66	0.85	1.04	\$3.08	0.77	0.99	1.28	1.56	\$4.60
	121%	69%	254%	58%	101%	45%	50%	50%	50%	49%
Rest of World	0.58	0.96	0.84	1.24	\$3.62	0.97	1.92	1.68	2.48	\$7.05
	205%	380%	180%	121%	190%	67%	100%	100%	100%	95%
Costs										
Cost of Revenue	197	192	198	213	799	204	204	204	204	815
SG&A	225	221	191	209	847	217	180	180	180	757
R&D	201	203	204	164	772	216	180	180	180	756
Other op. expenses	426	425	394	374	1,619	433	360	360	360	1,513

1
Triple-digit international growth because the new Android App is a "huge hit"

2
Evan & Co. somehow manage to grow top-line while cutting costs

Valuation: Let's be realistic



Valuation: The Endgame

SNAP Inc. \$, millions	Mar-17 1Q17	Jun-17 2Q17	Sep-17 3Q17	Dec-17 4Q17	FY17	Mar-18 1Q18	Jun-18 2Q18	Sep-18 3Q18	Dec-18 4Q18	FY18	Mar-19 1Q19	Jun-19 2Q19E	Sep-19 3Q19E	Dec-19 4Q19E	FY19	FY20
Revenue	149.6	181.7	207.9	285.7	824.9	230.7	262.3	297.7	389.8	1,180.50	320.4	298.9	335.8	440.2	1,395.4	1,546.7
% change										43%					18%	11%
Total DAUs	166	174	178	187	176	191	188	185	186	188	190	189	186	187	188	188
North America	71	75	77	80	76	81	80	79	79	80	80	80	79	79	79	79
										5.3%	-1.2%	-0.5%	-0.5%	-0.5%	-0.7%	-0.5%
Europe	55	57	57	60	57	62	61	59	60	61	61	61	59	60	60	61
										5.7%	-1.6%	0.5%	0.5%	0.5%	0.0%	0.5%
Rest of World	40	42	44	47	43	48	47	47	47	47	49	48	48	48	48	48
										9.2%	2.1%	2.0%	2.0%	2.0%	2.0%	2.0%
ARPU	0.90	1.05	1.17	1.53	\$4.65	1.21	1.40	1.60	2.09	\$6.30	1.69	1.58	1.81	2.36	\$7.43	\$8.25
% change										35%					18%	11%
North America	1.81	1.97	2.17	2.75	\$8.70	2.10	2.21	2.62	3.38	\$10.31	2.81	2.41	2.86	3.68	\$11.76	\$12.93
										19%	34%	9%	9%	9%	14%	10%
Europe	0.24	0.39	0.24	0.66	\$1.53	0.53	0.66	0.85	1.04	\$3.08	0.77	0.77	0.99	1.22	\$3.75	\$4.13
										101%	45%	17%	17%	17%	22%	10%
Rest of World	0.19	0.20	0.30	0.56	\$1.25	0.58	0.96	0.84	1.24	\$3.62	0.97	1.25	1.09	1.61	\$4.92	\$5.76
										190%	67%	30%	30%	30%	36%	17%
Costs																
Google Cloud (5 yr, \$400m each year)					400					400					400	400
AWS (Contractual, until 2022)					0					90	38	38	38	38	150	215
Infrastructure total *minimum					400					490	138	138	138	138	550	615
Other (revenue share, etc)					278					309	66	70	70	70	276	250
Cost of Revenue					678	197	192	198	213	799	204	245	245	245	939	865
SG&A					2,058	225	221	191	209	847	217	261	261	261	1,001	1,109
R&D					1,535	201	203	204	164	772	216	232	232	232	913	1,012
Other op. expenses					678	426	425	394	374	1,619	433	494	494	494	1,914	2,121
% change										139%					18%	11%
EBIT					-530	-393	-354	-294	-197	-1,237	-316	-440	-403	-298	-1,457	-1,439
EBIT(1-t)					-530	-393	-354	-294	-197	-1,237	-316	-440	-403	-298	-1,457	-1,439
Sales to Capital ratio						2	2	2	2	2	2	2	2	2	2	2
Reinvestment						41	40	45	52	178	45	18	19	25	107	76
FCFF												-458	-422	-324	-1,564	-1,515
Discount Factor												0.98 x	0.95 x	0.93 x		0.85 x
Year												0.25	0.50	0.75		1.75

SNAP Inc. Valuation	
PV (CF)	-\$2,433
WACC	10%
FY21 Growth	15%
Terminal Value	\$14,230
FY21 Discount	0.77
Enterprise Value	\$8,516
Add: Cash	1208.7
Less: Debt	375.4
Equity Value	\$9,349
Shares out.	1324.9
Implied val.	\$7.06
Current	10.49
Downside	-32.7%

Recap

1 Market is highly focused on user growth and has over extrapolated recent growth trends

+

2 Business can only materially improve through ARPU which is unlikely to occur

+

3 Structurally unsound business model with unreliable management

+

4 Good timing in terms of rebate

= **Convincing short**

Appendix