

Snap

Post layoff model update and 4Q preview: Raising EBITDA, cuts cautious for revs.

Reiterate Rating: NEUTRAL | PO: 18.00 USD | Price: 16.75 USD

Adjusting estimates for layoffs and peer results

The company reports on 2/6. We are adjusting our estimates for announced 10% layoffs and Meta & YouTube results, which suggest strong social ad spending in 4Q. We believe Snap expectations have been building for acceleration towards 20%+ growth in 2024, and latest layoffs is not a positive read for revenue upside (stock down 2% vs S&P 500 down 0.3%). We think 4Q'23 ad spend was solid, we raise revenues to \$1,389mn (vs Street at \$1,384mn) and expect Snap to guide 1Q at low double-digit y/y rev. growth (inline). We estimate in line 4Q DAUs at 412mn (+10% y/y), though 3rd party data suggests some deceleration in DAU growth in possible in 1Q.

Raising '24 revenues by 2%, EBITDA higher on layoffs

Given Meta's 1Q upside guidance and announced layoffs, we are slightly raising revs, with a bigger raise for EBITDA. Still, given layoffs, we think big upside with growth rates at over 20% (similar to Meta) in 2024 seem less likely. For 1Q'24, we est. revenues of \$1,110mn (up 12% y/y) & EBITDA loss at (\$50mn). For 2024, we increase rev. by 2% to \$5.3bn, lower Opex by 7% and raise Adj. EBITDA to \$518mn (vs prior \$220mn). For 2025, we raise revenues by 2% to \$6.0bn & Adj. EBITDA to \$785mn (vs prior \$506mn).

Potential 4Q positives, negatives, and questions

Potential 4Q positives include: 1) 1Q outlook suggesting growing traction for Snap's DR solutions, 2) Improving usage aided by Spotlight and AI features, 3) Commentary suggesting full-year EBITDA upside potential following layoffs. Negatives could be: 1) 1Q outlook fails to keep up with Meta's positive q/q revenue trends, 2) Growing AI/ML infrastructure spends offsets opex cost cuts, and 3) Below Street user outlook given increasing (Instagram and TikTok) competition.

Improving profitability likely a 2024 focus

Layoffs suggests improving EBITDA margins and cutting SBC will be an increasing focus at Snap, a positive. However, even our upwardly revised 2025 EBITDA estimates, stock is valued at 42x 2025 EBITDA, well above peers. Reiterate Neutral. We raise our P/S based PO to \$18 (5.5x 2025E EV/Revenue) from \$16 (5.0x 2024E) given slightly higher 2025 revenue estimates of \$6.0bn (vs prior \$5.9bn) and much higher margin estimates but continue to prefer Meta and Pinterest in social group for similar to higher growth expectations along with much lower EV/EBITDA valuations.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	0.49	0.19	0.08	0.40	0.54
GAAP EPS	(0.31)	(0.90)	(0.82)	(0.50)	(0.34)
EPS Change (YoY)	NM	-61.2%	-57.9%	400.0%	35.0%
Consensus EPS (Bloomberg)			0.08	0.05	0.24
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	34.2x	88.2x	209.4x	41.9x	31.0x
EV / EBITDA*	49.7x	81.7x	296.1x	79.3x	39.3x
Free Cash Flow Yield*	0.7%	0.2%	-0.4%	0.8%	1.7%
* For full definitions of <i>iQ</i> method SM measures, see page 17.					

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Refer to important disclosures on page 19 to 22. Analyst Certification on page 16. Price
Objective Basis/Risk on page 16.

Timestamp: 05 February 2024 05:50PM EST

05 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	16.00	18.00
2023E Rev (m)	4,609.4	4,634.3
2024E Rev (m)	5,168.2	5,254.3
2025E Rev (m)	5,916.4	6,036.4
2024E EPS	0.15	0.40
2025E EPS	0.28	0.54

Justin Post Research Analyst BofAS +1 415 676 3547 justin.post@bofa.com

Nitin Bansal, CFA Research Analyst BofAS nbansal7@bofa.com

Huiyu (Harvey) Qin Research Analyst BofAS huiyu.qin@bofa.com

Stock Data

Price	16.75 USD
Price Objective	18.00 USD
Date Established	5-Feb-2024
Investment Opinion	C-2-9
52-Week Range	7.86 USD - 17.90 USD
Mrkt Val (mn) / Shares Out	30,040 USD / 1,793.4
(mn)	
Free Float	74.1%
Average Daily Value (mn)	372.97 USD
BofA Ticker / Exchange	SNAP / NYS
Bloomberg / Reuters	SNAP US / SNAP.N
ROE (2023E)	5.2%
Net Dbt to Eqty (Dec-2022A)	-7.6%
ESGMeter™	High

Please refer to "BofA ESGMeter Methodology".

DAUs: Daily active users IDFA: Identifier for Advertisers CPM: Cost per thousand RoW: Rest of the World SBC: stock-based compensation Al: artificial Intelligence ML: Machine Learning NT: Near term

ST: Sensor Tower Int'l: International DR: Direct Response QTD: Quarter to Date FX: Foreign Exchange DMA: Digital Markets Act

IG: Instagram

*iQ*profile[™]Snap

iQmethod [™] – Bus Performance*					
(US\$ Millions)	2021A	2022A	2023E	2024E	20251
Return on Capital Employed	6.5%	0.3%	1.5%	4.7%	9.0%
Return on Equity	25.4%	9.4%	5.2%	26.5%	31.0%
Operating Margin	9.6%	-0.2%	-1.1%	5.3%	9.8%
Free Cash Flow	223	55	(114)	245	521
i Q method [™] – Quality of Earnings*					
(US\$ Millions)	2021A	2022A	2023E	2024E	20251
Cash Realization Ratio	0.4x	0.6x	0.9x	0.8x	0.9
Asset Replacement Ratio	0.6x	0.6x	1.4x	1.5x	1.6
Tax Rate	NM	NM	NM	1.1%	1.0%
Net Debt-to-Equity Ratio	-38.0%	-7.6%	11.9%	17.0%	-2.9%
Interest Cover	22.3x	-1.8x	-2.4x	9.7x	26.9>
Income Statement Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Sales	4,117	4,602	4,634	5,254	6,036
% Change	64.2%	11.8%	0.7%	13.4%	14.9%
Gross Profit	2,386	2,799	2,565	2,856	3,382
% Change	79.0%	17.3%	-8.3%	11.3%	18.4%
EBITDA	620	377	104	388	785
% Change	NM	-39.2%	-72.4%	273.3%	102.0%
Net Interest & Other Income	228	15	116	178	154
Net Income (Adjusted)	779	301	131	662	897
% Change	NM	-61.3%	-56.4%	404.5%	35.4%
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Net Income from Cont Operations (GAAP)	(488)	(1,440)	(1,314) 157	(812) 175	(568)
Depreciation & Amortization	119 (196)	202 (35)		(68)	191 (124
Change in Working Capital	(190)	(33)	(64) 0	(00)	
Deferred Taxation Charge	U		U		,
()ther Adjustments Net	OEO		1 225		C
Other Adjustments, Net	858	1,457	1,335	1,213	1,322
Capital Expenditure	(70)	1,457 (129)	(227)	1,213 (263)	1,322 (300)
Capital Expenditure Free Cash Flow	(70) 223	1,457 (129) 55	(227) -114	1,213 (263) 245	1,322 (300) 521
Capital Expenditure Free Cash Flow % Change	(70) 223 NM	1,457 (129) 55 -75.2%	(227) -114 NM	1,213 (263) 245 NM	1,322 (300 521 112.6 %
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase	(70) 223 NM 1,065	1,457 (129) 55 -75.2% 484	(227) -114 NM (125)	1,213 (263) 245 NM (375)	1,322 (300 521 112.6 %
Capital Expenditure Free Cash Flow % Change	(70) 223 NM	1,457 (129) 55 -75.2%	(227) -114 NM	1,213 (263) 245 NM	1,322 (300) 521 112.6%
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt	(70) 223 NM 1,065	1,457 (129) 55 -75.2% 484 0	(227) -114 NM (125) 0	1,213 (263) 245 NM (375)	(300) 521 112.6%
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec)	(70) 223 NM 1,065 0	1,457 (129) 55 -75.2% 484 0	(227) -114 NM (125) 0	1,213 (263) 245 NM (375) 0	1,322 (300) 521 112.6% C
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions)	(70) 223 NM 1,065 0 0	1,457 (129) 55 -75.2% 484 0 0	(227) -114 NM (125) 0 0	1,213 (263) 245 NM (375) 0	1,322 (300) 521 112.6% (0
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents	(70) 223 NM 1,065 0 0 2021A 3,693	1,457 (129) 55 -75.2% 484 0 0	(227) -114 NM (125) 0 0 2023E 3,451	1,213 (263) 245 NM (375) 0 0	1,322 (300) 521 112.6% (0 0 2025) 3,842
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables	(70) 223 NM 1,065 0 0 2021A 3,693 1,069	1,457 (129) 55 -75.2% 484 0 0 0	(227) -114 NM (125) 0 0 2023E 3,451 1,251	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358	1,322 (300) 521 112.6% (0 0 2025) 3,842 1,551
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158	2025i 3,842 1,551
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92 203	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134 272	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169 406	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158 493	2025 3,842 1,551 186 602
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92 203 2,480	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134 272 2,501	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169 406 2,471	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158 493 2,471	2025 3,842 1,551 180 602 2,471
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92 203 2,480 7,536	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134 272 2,501 8,030	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169 406 2,471 7,747	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158 493 2,471 7,802	2025 3,842 1,551 186 602 2,471 8,647
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92 203 2,480 7,536 NA	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134 272 2,501 8,030 NA	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169 406 2,471 7,747 NA	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158 493 2,471 7,802 NA	(0 1,322 (300) 521 112.6% (0 0 2025 3,842 1,557 180 602 2,477 8,647
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Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92 203 2,480 7,536 NA 852 2,253	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134 272 2,501 8,030 NA 1,216 3,743	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169 406 2,471 7,747 NA 1,035 3,748	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158 493 2,471 7,802 NA 1,064 3,748	2025 (300 521 112.6% (0 0 2025 3,842 1,551 180 602 2,471 8,647 NA 1,156 3,748
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92 203 2,480 7,536 NA 852 2,253 641	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134 272 2,501 8,030 NA 1,216 3,743 491	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169 406 2,471 7,747 NA 1,035 3,748 473	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158 493 2,471 7,802 NA 1,064 3,748 473	2025 3,842 1,551 186 602 2,471 8,647 NA 1,156 3,748 473
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Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	(70) 223 NM 1,065 0 0 2021A 3,693 1,069 92 203 2,480 7,536 NA 852 2,253 641	1,457 (129) 55 -75.2% 484 0 0 0 2022A 3,939 1,183 134 272 2,501 8,030 NA 1,216 3,743 491	(227) -114 NM (125) 0 0 2023E 3,451 1,251 169 406 2,471 7,747 NA 1,035 3,748 473	1,213 (263) 245 NM (375) 0 0 2024E 3,321 1,358 158 493 2,471 7,802 NA 1,064 3,748 473	1,322 (300) 521 112.6%

Company Sector

Internet/e-Commerce

Company Description

Snap, Inc. is a leading social media platform. Through Snapchat, the company facilitates communication through visual media, enabled by the mobile camera. Users are able to share photos, videos and text and are exposed to publisher content from top media companies such as WSJ, Vogue, People, MTV, and CNN. Advertisers use the platform to promote products, which has a strong reach with the coveted millennial demographic.

Investment Rationale

Snap is a top mobile communication tool for users under 35, and is early in its opportunity to capitalize on monetization of usage. We are optimistic on Snap's opportunity to rapidly increase monetization of popular screens including Discover, Maps and Spotlight. However given increasing competition from Reels and TikTok, scale disadvantages (for ad sales and use of Al/ML), and declining time spent on Stories, we remain Neutral.

Stock Data

Average Daily Volume 22,266,660

Quarterly Earnings Estimates

	2022	2023
Q1	-0.02A	0.01A
Q2	-0.02A	-0.02A
Q3	0.08A	0.02A
Q4	0.13A	0.07E

4Q Preview Summary

The company reports on 2/6. We are adjusting our estimates for 10% layoffs and recent Meta & YouTube results, which suggest strong social ad spending in 4Q. However, we believe layoff announcement is not a positive read for 2024 revenue acceleration optimism (toward Meta's growth rates) that has been building since early November.

For 4Q'23, we now expect revenues of \$1,389mn (vs Street at \$1,384mn) and think Snap will likely guide 1Q at low double-digit y/y growth. We estimate 4Q DAUs at 412mn (+6mn q/q), in line with Street. Sensor Tower data suggests some pressure with QTD global DAUs down 1.3% (US down 3% & Int'l down 1%), so deceleration in 1Q y/y DAU growth outlook is possible.

4Q positives could include: 1) 4Q results & 1Q outlook suggesting strong traction for Snap's DR solutions and improving growth outlook, 2) Improving usage and engagement aided by My Al, Spotlight and Creator stories, and 3) Potential for EBITDA upside to Street 2024 estimates with other cost containment efforts. **Negatives** could include: 1) 1Q outlook below Street expectations (following a strong Meta outlook), suggesting share losses to Instagram, 2) Commentary suggesting increasing Al/ML investments will offset benefit of layoffs, 3) Below Street 1Q user outlook given increasing competition from Reels, TikTok and Shorts.

For the call, we expect questions around:

- 1Q revenue outlook relative to Meta
- Details on layoffs and outlook for 2024 expenses
- Progress and advertiser adoption of DR targeting and measurement solutions
- Potential impact from DMA and cookie depreciation
- Time spent trends on the platforms or on Spotlight and creator stories
- Update on monetization initiatives for Spotlight and Maps
- Update on new DR products and advertiser traction by segment (brand and DR)
- Traction of Al/ML features and impact on engagement and costs
- Ramp of Snapchat+ and potential revenue contribution goals for 2024

Estimate changes

Given Meta's 1Q upside guidance and announced layoffs, we are slightly raising revs, with a bigger raise for EBITDA. Given layoffs, we think big upside in growth rates at over 20% (similar to Meta) in 2024 seem less likely. For 1Q'24, we estimate revenues of \$1,110mn (up 12% y/y) & EBITDA loss at (\$50mn). For 2024, we increase rev. by 2% to \$5.3bn, lower Opex by 7% and raise Adj. EBITDA to \$518mn (vs \$220mn). For 2025, we raise revenues by 2% to \$6.0bn and Adj. EBITDA to \$785mn (vs \$506mn previously).



Key Metrics

Exhibit 1: 4Q'23 Key Metrics

We are now above Street for 4Q'23 revenue, EBITDA and in line for users.

Metric	BofA Ests.	Consensus	Comments
Total Revenue	\$1,389	\$1,383	We are raising estimates to slightly above Street for 4Q'23 total revenue
Y/Y Growth	6.9%	6.4%	
DAU	412	412	We are in line with Street estimates and estimate 412mn (+6mn $$ q/q) DAUs in 4Q'23
DAU growth y/y	10%	10%	
ARPU	\$3.37	\$3.35	We estimate 3% y/y decline in 4Q'23 vs 6% y/y decline in 3Q'23
North America ARPU	\$8.87	\$8.71	We estimate 1% y/y growth in 4Q'23 vs 8% increase in 1Q'23
Operating expenses (non-GAAP)	\$700	\$724	We are modeling 6% y/y increase in 4Q'23 vs 13% y/y decline in 3Q'23
Operating income (non-GAAP)	\$106	\$62	We are modeling 8% non-GAAP operating margin
Stock based Compensation	\$363.7	\$371.1	We estimate 26% of 4Q'23 revenue vs 30% in 3Q'23
Adjusted EBITDA	\$146.81	\$115.00	Forecasting 11% EBITDA margin in 4Q'23 vs 3% in 3Q'23 and 18% in 4Q'22
Non-GAAP EPS	\$0.07	\$0.06	Modeling \$0.07 vs \$0.02 in 3Q'23 and \$0.13 in 4Q'22
GAAP EPS	(\$0.15)	(\$0.17)	We are slightly above Street consensus
Employees	5,394	5,359	Estimate flat q/q HC in 4Q23
Free cash flow from operations	(\$38)	\$76	We are below Street consensus

Source: BofA Global Research, Visible Alpha

BofA GLOBAL RESEARCH

Estimates vs consensus

We are now slightly above Street for 4Q'23 revenue at \$1,389mn (up 7% y/y) vs Street at \$1,383mn (up 6% y/y). We expect 2pts acceleration vs 3Q on 6pt easier comp. For 4Q'23 EBITDA, we are at \$147mn, above Street at \$115mn and expect non-GAAP Opex to increase 6% q/q (up 6% y/y). For 1Q'24, we estimate revenues of \$1,110mn (up 12% y/y), slightly below Street at \$1,125mn and model 5pts of acceleration vs 4Q. We estimate EBITDA of (\$50mn), below Street at (\$24mn).

Exhibit 2: Estimates vs consensus

We are below Street for 1Q'24 Revenue/EBITDA.

	4Q'23E	1Q24E	2023E	2024E
Revenue				
BofA est.	\$1,389	\$1,110	\$4,634	\$5,254
Y/Y %	6.9%	12%	1%	13%
Street	\$1,383	\$1,125	\$4,628	\$5,303
Y/Y %	6.4%	14%	1%	14%
BofA vs Street	Above	Below	Above	Below
EBITDA				
BofA est.	\$147	(\$50)	\$149	\$518
% Margin	11%	(4%)	3%	10%
Street	\$115	(\$24)	\$113	\$323
BofA vs Street	Above	Below	Above	Above
Non-GAAP EPS				
BofA est.	\$0.07	(\$0.01)	\$0.08	\$0.40
Street	\$0.06	(\$0.02)	\$0.06	\$0.18
BofA vs Street	Above	Above	Above	Above

Source: BofA Global Research, Visible Alpha



Estimate Changes

We are adjusting our estimates for the 10% layoffs and Meta and Google results, which suggest better than expected ad spending in 4Q. We believe the layoffs are not a positive read for Snap's 1Q'24 revenue outlook. Our updated estimates reflect lower expenses and marginally higher average revenue per user (ARPU) and users. We now expect 13% y/y revenue growth in 2024 (vs 12% previously) but higher EBITDA margins of 10% (vs 4% prior).

For 4Q'23, we estimate revenues of \$1,389mn (up 7% y/y) and Adj. EBITDA to \$147mn. For 1Q'23, we estimate revenues of \$1,110mn and Adj. EBITDA of (\$50mn). For 2024, we are increasing our revenue estimates by 2% to \$5.2bn, lower Opex by 7% and estimate Adj. EBITDA of \$518mn (vs \$220mn previously). For 2025, we raise revenues by 2% to \$6.0bn and estimate Adj. EBITDA of \$785mn (vs \$506mn previously).

Exhibit 3: Estimate Changes

We are increasing 2025 Revenue/EBITDA to 6.0bn/785mn from 5.9bn/506mn.

		4Q'23E			1Q24E			2024E			2025E	
	New	Old	Diff	New	Old	Diff	New	Old	Diff	New	Old	Diff
Revenue	\$1,389	\$1,365	\$25	\$1,110	\$1,108	\$3	\$5,254	\$5,168	\$86	\$6,036	\$5,916	\$120
y/y %	7%	5%	2%	12%	12%	0%	13%	12%	1%	15%	14%	0%
q/q %	17%	15%	2%	-20%	-19%							
Cost of revenue	\$584	\$576	\$8	\$557	\$554	\$4	\$2,398	\$2,356	\$42	\$2,655	\$2,603	\$52
As a % of revenue	42%	42%	-0.2%	50%	50%	0.2%	46%	46%	0.1%	44%	44%	0.0%
Gross profit	\$806	\$789	\$17	\$553	\$554	(\$1)	\$2,856	\$2,812	\$44	\$3,382	\$3,313	\$68
Gross margin	58%	58%	0.2%	50%	50%	-0.2%	54%	54%	-0.1%	56%	56%	0.0%
Research and development	\$282	\$273	\$9	\$251	\$271	(\$20)	\$992	\$1,118	(\$126)	\$1,094	\$1,193	(\$99)
As a % of revenue	20%	20%	0%	23%	25%	-2%	19%	22%	-3%	18%	20%	-2%
Sales and marketing	\$236	\$239	(\$3)	\$217	\$222	(\$5)	\$900	\$921	(\$21)	\$970	\$1,007	(\$38)
As a % of revenue	17%	18%	0%	20%	20%	-0.5%	17%	18%	-0.7%	16%	17%	-1.0%
General and administrative	\$182	\$181	\$1	\$178	\$177	\$0	\$685	\$729	(\$44)	\$724	\$798	(\$74)
As a % of revenue	13%	13%	0%	16%	16%	0.0%	13%	14%	-1.1%	12%	13%	-1.5%
SBC	\$364	\$364	\$0	\$332	\$353	(\$21)	\$1,278	\$1,435	(\$158)	\$1,322	\$1,524	(\$202
As a % of revenue	26%	27%	0%	30%	32%	-2%	24%	28%	-3%	22%	26%	-4%
Operating expenses (ex-SBC)	\$700	\$693	\$7	\$645	\$670	(\$25)	\$2,577	\$2,767	(\$190)	\$2,788	\$2,998	(\$210
y/y %	6%	5%	1%	7%	12%	-4%	-2%	6%	-8%	8%	8%	0%
Operating income (GAAP)	(\$258)	(\$268)	\$10	(\$489)	(\$470)	(\$20)	(\$999)	(\$1,390)	\$391	(\$728)	(\$1,208)	\$481
Operating margin (GAAP)	-19%	-20%	1%	-44%	-42%	-2%	-19%	-27%	8%	-12%	-20%	8%
Operating income (loss) (ex-SBC)	\$106	\$96	\$10	(\$157)	(\$116)	(\$41)	\$214	S45	\$169	\$594	\$315	\$279
Operating margin (ex-SBC)	8%	7%	1%	-14%	-11%	-4%	4%	1%	3%	10%	5%	5%
GAAP net income (loss)	(\$240)	(\$250)	\$10	(\$440)	(\$422)	(\$19)	(\$812)	(\$1,204)	\$392	(\$568)	(\$1,044)	\$476
GAAP diluted EPS	(\$0.15)	(\$0.15)	\$0.01	(\$0.27)	(\$0.26)	(\$0.01)	(\$0.50)	(\$0.74)	\$0.24	(\$0.34)	(\$0.63)	\$0.29
Non-GAAP net income	\$115.1	\$106.8	\$8.3	(\$23.4)	(\$42.4)	\$19.0	\$662.4	\$248.9	\$413.5	\$897.1	\$461.9	\$435.2
Non-GAAP EPS	\$0.07	\$0.07	\$0.01	(\$0.01)	(\$0.03)	\$0.01	\$0.40	\$0.15	\$0.25	\$0.54	\$0.28	\$0.26
Diluted Shares	1,627	1,627	0	1,630	1,630	0	1,637	1,637	0	1,660	1,660	0
Adjusted EBITDA	\$147	\$137	\$10	(\$50)	(\$74)	\$24	\$518	\$220	\$299	\$785	\$506	\$279
EBITDA margin	11%	10%	1%	-4%	-7%	2%	10%	4%	6%	13%	9%	4%
Total DAUs	412	412	0	417	417	0	440	439	1	467	463	4
North America DAUs	101	101	0	101	101	0	102	102	0	103	103	0
Europe DAUs	96	96	0	97	97	0	99	99	0	102	102	0
RoW DAUs	215	215	0	219	219	0	239	238	1	262	258	4
	215	215	U	213								
	\$3.37	\$3.31	\$0.06	\$2.66	\$2.66	\$0.01	\$12.33	\$12.15	\$0.19	\$13.31	\$13.12	\$0.19
ARPU North America ARPU	\$3.37 \$0.00	\$3.31 \$8.72	\$0.06 (\$8.72)	\$2.66 \$0.00	\$2.66 \$6.89	(\$6.89)	\$12.33 \$0.00	\$32.24	(\$32.24)	\$0.00	\$35.81	(\$35.8
Europe ARPU	\$3.37	\$3.31	\$0.06	\$2.66 \$0.00 \$0.00	\$2.66		\$12.33			\$0.00 \$0.00	\$35.81 \$9.78	
North America ARPU	\$3.37 \$0.00	\$3.31 \$8.72	\$0.06 (\$8.72)	\$2.66 \$0.00	\$2.66 \$6.89	(\$6.89)	\$12.33 \$0.00	\$32.24	(\$32.24)	\$0.00	\$35.81	(\$35.8
North America ARPU Europe ARPU	\$3.37 \$0.00 \$0.00	\$3.31 \$8.72 \$2.40	\$0.06 (\$8.72) (\$2.40)	\$2.66 \$0.00 \$0.00	\$2.66 \$6.89 \$1.80	(\$6.89) (\$1.80)	\$12.33 \$0.00 \$0.00	\$32.24 \$8.78	(\$32.24) (\$8.78)	\$0.00 \$0.00	\$35.81 \$9.78	(\$35.8 (\$9.78

Source: BofA Global Research estimates, Company reports



Exhibit 3: Estimate Changes

We are increasing 2025 Revenue/EBITDA to \$6.0bn/\$785mn from \$5.9bn/\$506mn.

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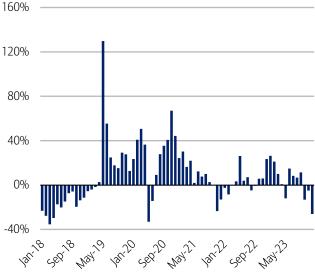
Data Update

Download Trends

According to Sensor Tower, Snap global downloads declined 16% y/y in 4Q'23 (vs up 9% y/y in 3Q'23) and down 12% q/q. US downloads were up 6% y/y (vs up 1% in 3Q'23) while international downloads were down 17% y/y (vs up 9% in 3Q'23).

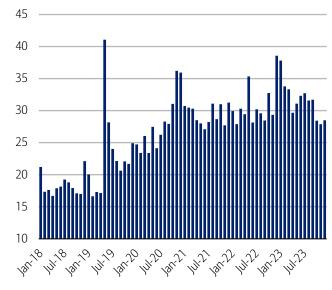
Exhibit 4: Snap monthly download trends (y/y)

Snap global downloads in 4Q'23 declined by 16% y/y.



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Exhibit 5: Snap worldwide gross downloads (millions) Snap worldwide gross downloads were at 84.8mn in 4Q'23.



Source: Sensor Tower

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User Trends

Source: Sensor Tower

According to Sensor Tower, Snap global DAUs were up 10% in 4Q'23 (vs up 12% y/y in 3Q'23) and up 2% q/q to 392mn. US DAUs were down 2% y/y (same as in 3Q'23) to 60mn while international DAUs were up 13% y/y (vs up 15% in 3Q'23) to 332mn.

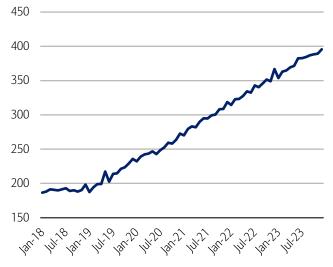


Exhibit 6: Snap worldwide DAU trend (y/y)

Snap worldwide Snap DAUs were up 10% y/y in 4Q.



Exhibit 7: Snap worldwide DAUs (millions)Snap had average of 392mn of global users in 4Q.



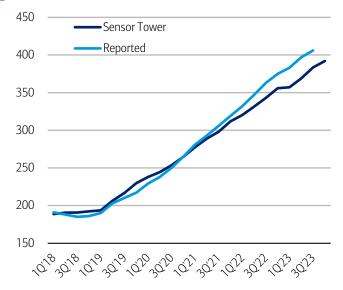
Source: Sensor Tower

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Historical Sensor Tower vs Actual

Exhibit 8: Sensor Tower DAUs vs reported DAUs*

*3Q'23 Sensor Tower DAUs +15mn q/q vs reported at +10mn q/q.



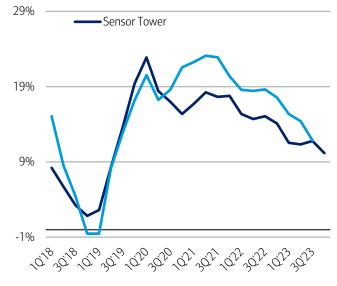
Source: Sensor Tower, company filings

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Exhibit 9: Sensor Tower DAU growth vs reported growth* (y/y)

*3Q'23 Sensor Tower DAUs were +12% y/y vs reported at +12% y/y.



Source: Sensor Tower, company filings

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1Q QTD User Data

Per Sensor Tower, average monthly worldwide (WW) DAUs declined 1.3% from 398mn to 393mn from Dec (31-day average) to Jan (30-day average). US DAUs declined 3.3% and International DAUs declined 0.9% from 337mn to 334mn.



Exhibit 10: Snap DAUs (mn)

Snap global DAU were at 393mn for MTD Jan'24.

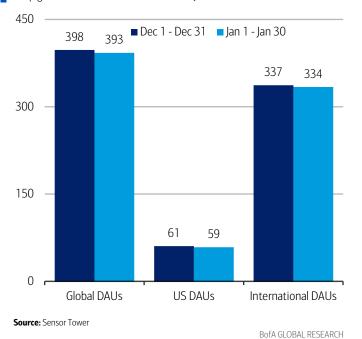
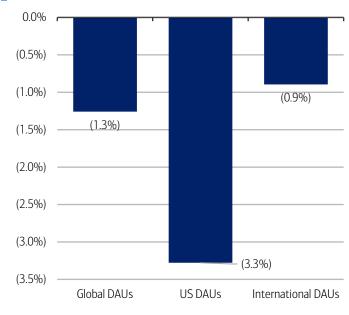


Exhibit 11: Change in Snap DAUs (%)

Snap WW DAUs decline 1.3% between Dec and Jan.



Source: Sensor Tower

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Time spent trends

US/North America

In Dec'23, Snap time spent per US DAU was down 2% y/y per Sensor Tower.

Exhibit 12: US Average Daily Time Spent per DAU Estimates (Minutes)

In Dec'23, Snap time spent per US DAU was down 2% y/y.

Company	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Facebook	45	45	46	46	45	45	45	46	47	47	46	45	45	43
y/y %	7%	8%	5%	6%	4%	6%	2%	2%	2%	2%	3%	2%	2%	(5%)
m/m %	0%	1%	1%	1%	(3%)	1%	(1%)	2%	2%	0%	(0%)	(2%)	(0%)	(6%)
Instagram	56	59	59	60	60	59	59	60	59	59	59	60	60	62
y/y %	6%	10%	9%	13%	17%	14%	13%	14%	13%	14%	14%	12%	7%	6%
m/m %	4%	5%	2%	0%	1%	(1%)	(1%)	1%	(1%)	0%	(1%)	2%	0%	3%
Pinterest	12	12	13	13	12	12	12	12	13	13	12	12	12	12
y/y %	19%	16%	12%	15%	15%	10%	11%	10%	6%	3%	(0%)	(2%)	(2%)	(0%)
m/m %	(0%)	2%	1%	(0%)	(3%)	(1%)	0%	2%	1%	2%	(6%)	0%	(0%)	3%
Snapchat	20	20	20	20	20	20	20	20	20	20	20	20	20	20
y/y %	(7%)	(8%)	(9%)	(8%)	(7%)	(4%)	(5%)	(5%)	(3%)	(4%)	(3%)	(3%)	(1%)	(2%)
m/m %	(2%)	2%	(3%)	1%	1%	2%	1%	(1%)	(3%)	(1%)	(0%)	1%	(0%)	0%
YouTube	74	76	77	76	76	75	75	76	76	76	74	75	75	77
y/y %	6%	7%	4%	7%	6%	2%	1%	5%	2%	9%	5%	2%	1%	2%
m/m %	1%	3%	2%	(1%)	(1%)	(1%)	(0%)	2%	0%	(0%)	(2%)	0%	(0%)	4%
TikTok	91	94	92	92	92	97	97	101	104	102	95	94	94	93
y/y %	2%	3%	(4%)	(1%)	2%	6%	8%	9%	11%	8%	3%	2%	4%	(1%)
m/m %	(2%)	3%	(2%)	(0%)	1%	6%	(0%)	4%	3%	(2%)	(7%)	(0%)	0%	(2%)

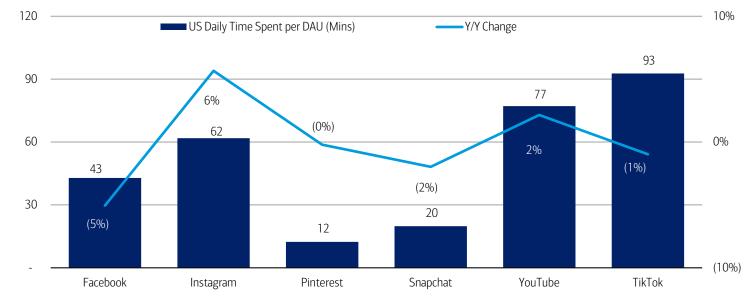
Source: Sensor Tower, BofA Global Research

Note: Daily time spent per DAU calculated using Sensor Tower total time spent in a month estimates and monthly average DAUs estimates.



Exhibit 13: Sensor Tower US Average Daily Time per DAU Estimates (Minutes) – December 2023

Per Sensor Tower, TikTok had the highest US average daily time per active user (~93 mins), declined 1% y/y in December.



Source: Sensor Tower, BofA Global Research

Note: Daily time spent per DAU calculated using Sensor Tower total time spent in a month estimates and monthly average DAUs estimates

International

In Dec, Snap Intl time spent per DAU per Sensor Tower was down 2% y/y.

Exhibit 14: International Average Daily Time Spent per DAU Estimates (Minutes)

In Dec, Snap Intl time spent per DAU was down 2% y/y.

Company	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Facebook	46	46	47	47	46	47	47	47	48	48	48	47	47	44
y/y %	8%	9%	6%	7%	5%	7%	2%	3%	3%	3%	3%	2%	2%	(4%)
m/m %	0%	1%	1%	1%	(3%)	2%	(1%)	1%	2%	0%	(0%)	(2%)	(0%)	(5%)
Instagram	53	55	56	56	57	57	56	57	57	57	56	57	57	62
y/y %	6%	10%	8%	13%	16%	15%	14%	15%	15%	16%	14%	12%	8%	11%
m/m %	4%	5%	2%	0%	1%	0%	(1%)	1%	0%	0%	(3%)	2%	0%	9%
Pinterest	12	12	12	12	12	12	12	12	12	13	12	12	12	12
y/y %	19%	16%	12%	15%	14%	10%	10%	10%	6%	3%	(0%)	(2%)	(2%)	(1%)
m/m %	(0%)	2%	1%	(0%)	(3%)	(1%)	0%	2%	1%	2%	(6%)	0%	(0%)	3%
Snapchat	20	20	19	20	20	20	21	20	20	20	19	20	20	20
y/y %	(8%)	(8%)	(12%)	(9%)	(7%)	(3%)	(4%)	(4%)	(3%)	(4%)	(3%)	(2%)	(0%)	(2%)
m/m %	(2%)	2%	(5%)	2%	1%	3%	1%	(0%)	(3%)	(1%)	(1%)	2%	(0%)	1%
YouTube	74	76	78	77	76	75	75	76	77	77	75	75	75	78
y/y %	6%	8%	4%	9%	7%	2%	1%	5%	2%	9%	5%	2%	1%	2%
m/m %	1%	3%	2%	(1%)	(1%)	(2%)	(0%)	2%	0%	(0%)	(2%)	0%	0%	3%
TikTok	76	79	76	74	77	82	81	84	86	83	77	76	76	77
y/y %	(1%)	(0%)	(6%)	(5%)	(0%)	4%	6%	9%	11%	6%	3%	0%	1%	(3%)
m/m %	(0%)	4%	(4%)	(2%)	4%	6%	(1%)	4%	2%	(3%)	(7%)	(2%)	0%	0%

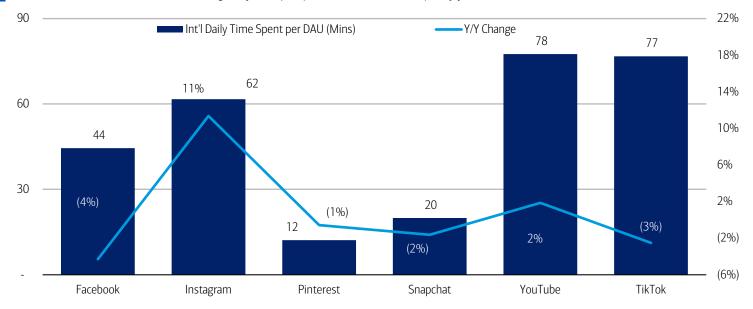
Source: Sensor Tower, BofA Global Research

Note: Daily time spent per DAU calculated using Sensor Tower total time spent in a month estimates and monthly average DAUs estimates.



Exhibit 15: International Average Daily Time Spent per DAU Estimates (Minutes) - December 2023

YouTube leads in international markets in average daily time spent per active user at 78mins (up 9% y/y).



Source: Sensor Tower, BofA Global Research

Note: Daily time spent per DAU calculated using Sensor Tower total time spent in a month estimates and monthly average DAUs estimates

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Ad Manager Data Update

Snap ad manager average monthly user reach in 4Q'23 was down 17mn q/q to 648mn (up 2% y/y and down 3% q/q), with ROW down 15mn (up 6% y/y and down 4% q/q), North America down 1mn (down 1% y/y and q/q), Europe flat q/q (down 5% y/y). It is possible that Snap Ad Manager implemented modifications to its user reporting system, which may explain the drop in rest of world (ROW) user numbers in 4Q. Snap ad manager tracks 28-day rolling user counts (a better proxy for MAUs vs reported DAUs) and can double count users traveling between countries.



Exhibit 16: Snap ad manager worldwide MAUs

Snap ad manager MAUs in 4Q were up 2% y/y but down 3% q/q.

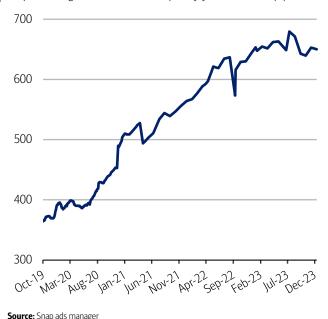
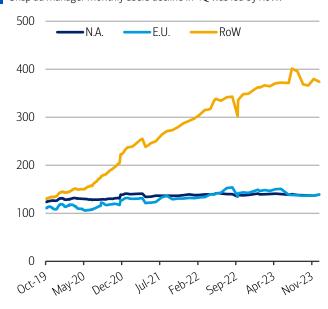


Exhibit 17: Snap ad manager regional MAUs

Snap ad manager monthly users decline in 4Q was led by RoW.



Source: Snap ads manager

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How we look at the data

Snap ad manager gives audience insight on monthly reach (not daily) into 73 individual countries. We then aggregate the median values (a range is given for each country) for each region. With ad manager data showing a rolling 28 day user count we take an average of the last day of each month within a quarter to base our assumptions.

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Political Ad Spending data up on y/y basis

We track political ad spending disclosures from Snap to see the trends of political ad spending and CPMs. Political ad spending in 4Q increased 0.7mn q/q to 0.7mn q/q



Exhibit 18: Snap US political ad spendingPolitical ad spending in 4Q increased to \$0.8mn from \$0.26mn in 3Q'23.

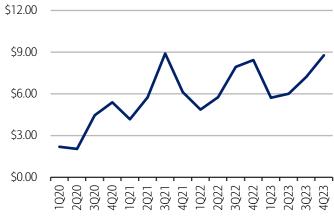
Quarter	Cost	Impressions	CPMs	Y/Y
3Q18	\$115,587	37,735,846	\$3.06	
4Q18	\$505,223	136,231,816	\$3.71	-
1Q19	\$186,972	71,466,012	\$2.62	
2Q19	\$279,241	184,078,596	\$1.52	-
3Q19	\$1,307,910	476,657,802	\$2.74	-10%
4Q19	\$2,631,496	933,735,066	\$2.82	-24%
1Q20	\$2,645,587	1,208,821,579	\$2.19	-16%
2Q20	\$1,128,653	552,720,686	\$2.04	35%
3Q20	\$7,459,970	1,671,464,840	\$4.46	63%
4Q20	\$8,756,735	1,624,448,991	\$5.39	91%
1Q21	\$1,124,180	269,627,413	\$4.17	91%
2Q21	\$892,240	155,299,705	\$5.75	181%
3Q21	\$6,336,091	712,092,189	\$8.90	99%
4Q21	\$677,620	110,742,113	\$6.12	14%
1Q22	\$464,405	95,268,345	\$4.87	17%
2Q22	\$1,433,911	249,139,638	\$5.76	0%
3Q22	\$1,887,789	237,729,191	\$7.94	-11%
4Q22	\$4,398,299	521,547,739	\$8.43	38%
1Q23	\$288,487	50,474,897	\$5.72	17%
2Q23	\$1,129,227	187,951,673	\$6.01	4%
3Q23	\$255,628	35,431,132	\$7.21	-9%
4Q23	\$1,019,037	116,165,042	\$8.77	4%

Source: Snap

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Exhibit 19: Snap US political ad spending CPMs (\$)

Average CPMs of US political spend were \$8.77in 4Q, up 4% y/y.



Source: Snap



Valuation

Snap is currently trading at ~5x Street 2025 revenue estimates, at the lower end of its 5-year trading range of 3-24x and 5-year average of 9x. Per Bloomberg, on a 2-year forward EV/Rev basis, Snap is trading at 4.5x, compared to Pinterest at 6.2x. On a 2-year forward EV/EBITDA multiple, Snap is currently trading at 40x (vs Pinterest at 21x).

Exhibit 20: Snap's 2Yr Forward EV/ Rev

Snap is trading ~50% discount to its 5yr historical average 2yr forward EV/Rev of 9x.



Source: Bloomberg

4Q product and company news

Snap adds feature for Al-generated photos

Snapchat+ has introduced a new feature that allows users to create images based on text prompts. Users can type a text prompt input or chose a premade prompt to generate images. The users can also edit the Al generated images and add messages before sending to others. Snap also released other Al features for Snapchat+ subscribers to edit images with Al, including a feature that can make a subject in photo to appear further from camera.

Snap launches new ChatGPT powered Lens API

Snap released a new version of AR development tool, Lens Studio 5.0. The new AR development tool is designed to support more advanced AR development with increased productivity and the addition of new Al capabilities. The company has also partnered with OpenAl to develop a new ChatGPT Remote API that allows developers to leverage ChatGPT in their Lenses. With the new API, developers can generate text-based content to create new types of learning, conversational, and creative experiences for Snapchat users. For example, developers can create Lenses that feature infinite quizzes and randomizers created by ChatGPT or they can create new types of Lenses that change the camera style by automatically applying filters based on the user's prompt.

Snap streamlines product development

In early Nov, Snap laid off nearly 20 employees from its product team. The layoffs were part of a reorganization to streamline operations and not focused on any specific product. The company suggested that its decision was related to focusing resources and increasing the pace of product development, rather than requiring to reduce headcount for economic reasons.

Snap adds AI pets feature

Snapchat launched a new AI pets feature for Snapchat+ subscribers. With the new feature, user can add real or imaginary Bitmoji pets and customize the figure of the AI pets. The Bitmoji AI pet will accompany the Bitmoji figure of the user on Snap Maps.



Exhibit 21: Stocks mentionedPrices and ratings for stocks mentioned in this report

Bloomberg ticker	Company name	Price	Rating
SNAP US	Snap Inc	US\$ 16.75	C-2-9
META US	Meta Platforms	US\$ 459.41	C-1-7
PINS US	Pinterest	US\$ 39.67	C-1-9
	SNAP US META US	SNAP US Snap Inc META US Meta Platforms	SNAP US Snap Inc US\$ 16.75 META US Meta Platforms US\$ 459.41

Source: BofA Global Research



Price objective basis & risk

Meta Platforms Inc (META)

Our \$510 price objective is based on 21x 2025E GAAP EPS, plus net cash. On a total company basis, including Metaverse investments, our valuation is largely in line with S&P 500 (over the past five years Meta has had a 2pt average premium to S&P). We think accelerating revenue growth and conservative expense management can lead to 3-year EPS growth above the S&P 500.

Downside risks are decline in user activity from competition, privacy or date issues impact revenue generation, potential for Street to assign a negative value to Metaverse (Reality Labs) given significant investments, and new regulations that impact monetization.

Pinterest (PINS)

Our \$42 price objective is based on 6.0x 2024E EV/Revenue, within Pinterest's historical EV/Revenue valuation range and below its 8x 10-year average. Our valuation reflects a premium to peer group multiples given early stage of monetization and 30%+ margin opportunity.

Risks to our PO are: 1) US user growth below peers, 2) seemingly high ad loads, could limit 3rd party partner benefits, 3) heavy competition for both general usage and shopping activity, 4) high cost of Al infrastructure, and 5) multiple compression given high SBC expense.

Snap (SNAP)

Our \$18 price objective is based on 5.5x 2025E EV/Revenue, within Snap's historical EV/Revenue valuation range. Our valuation reflects a modest discount to mid-cap Online media peer group multiples given usage pressure, revenue volatility and low FCF including SBC expense.

Risks to our PO are 1) deceleration in user growth that would raise concerns on long-term revenue opportunity, 2) pressure on usage due to competing services, and 3) valuation that has less earnings based support than peers when including SBC.

Analyst Certification

I, Justin Post, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Alphabet	GOOGL	GOOGL US	Justin Post
	Alphabet	GOOG	GOOG US	Justin Post
	Amazon.com	AMZN	AMZN US	Justin Post
	AppLovin	APP	APP US	Omar Dessouky, CFA
	DoorDash	DASH	DASH US	Michael McGovern
	DoubleVerify Holdings, Inc.	DV	DV US	Omar Dessouky, CFA
	Electronic Arts	EA	EA US	Omar Dessouky, CFA
	Expedia	EXPE	EXPE US	Justin Post
	Integral Ad Science Holding Corp.	IAS	IAS US	Omar Dessouky, CFA
	LegalZoom	LZ	LZ US	Michael McGovern
	Match Group	MTCH	MTCH US	Curtis Nagle, CFA
	Meta Platforms Inc	META	META US	Justin Post



US - Internet Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Pinterest	PINS	PINS US	Justin Post
	RH	RH	RH US	Curtis Nagle, CFA
	Roblox Corp. Class A	RBLX	RBLX US	Omar Dessouky, CFA
	Squarespace, Inc.	SQSP	SQSP US	Michael McGovern
	Uber	UBER	UBER US	Justin Post
	Udemy Inc	UDMY	UDMY US	Curtis Nagle, CFA
	Vivid Seats	SEAT	SEAT US	Curtis Nagle, CFA
	Wayfair	W	W US	Curtis Nagle, CFA
	Wix.com	WIX	WIX US	Michael McGovern
NEUTRAL				
RECIRAL	ACV Auctions	A C) / A	ACVA US	Custia Nasila CEA
		ACVA		Curtis Nagle, CFA
	Airbnb	ABNB	ABNB US	Justin Post
	Beyond Inc	BYON	BYON US	Curtis Nagle, CFA
	Booking Holdings Inc	BKNG	BKNG US	Justin Post
	Bumble	BMBL	BMBL US	Curtis Nagle, CFA
	Digital Turbine, Inc	APPS	APPS US	Omar Dessouky, CFA
	Duolingo	DUOL	DUOL US	Curtis Nagle, CFA
	eBay	EBAY	EBAY US	Justin Post
	Etsy, Inc.	ETSY	ETSY US	Curtis Nagle, CFA
	Instacart	CART	CART US	Justin Post
	Magnite, Inc.	MGNI	MGNI US	Omar Dessouky, CFA
	Snap	SNAP	SNAP US	Justin Post
	Take-Two Interactive	TTWO	TTWO US	Omar Dessouky, CFA
	Zillow	ZG	ZG US	Curtis Nagle, CFA
	Zillow	Z	Z US	Curtis Nagle, CFA
UNDERPERFORM				
	Chewy Inc	CHWY	CHWY US	Curtis Nagle, CFA
	Lyft, Inc.	LYFT	LYFT US	Michael McGovern
	Opendoor Technologies	OPEN	OPEN US	Curtis Nagle, CFA
	Peloton	PTON	PTON US	Curtis Nagle, CFA
	Playtika	PLTK	PLTK US	Omar Dessouky, CFA
	Redfin Corp	RDFN	RDFN US	Curtis Nagle, CFA
	Shutterstock	SSTK	SSTK US	Curtis Nagle, CFA

Pmethod[™] Measures Definitions

Business Performance Return On Capital Employed	Numerator NOPAT = (EBIT + Interest Income) × (1 — Tax Rate) + Goodwill Amortization
Return On Equity Operating Margin	Net Income Operating Profit
Earnings Growth	Expected 5 Year CAGR From Latest Actual
Free Cash Flow	Cash Flow From Operations – Total Capex

Quality of EarningsNumeratorCash Realization RatioCash Flow From OperationsAsset Replacement RatioCapexTax RateTax ChargeNet Debt-To-Equity RatioNet Debt = Total Debt = Cash & Equivalents

 Price / Earnings Ratio
 Current Share Price

 Price / Book Value
 Current Share Price

 Dividend Yield
 Annualised Declared Cash Dividend

 Free Cash Flow Yield
 Cash Flow From Operations - Total Capex

 Enterprise Value / Sales
 EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Numerator

Other LT Liabilities EV / EBITDA Enterprise Value

Denominator

Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Shareholders' Equity
Sales

N/A N/A

Denominator

Net Income Depreciation Pre-Tax Income Total Equity Interest Expense

Denominator

Diluted Earnings Per Share (Basis As Specified) Shareholders' Equity / Current Basic Shares

Current Share Price

 ${\sf Market\ Cap=Current\ Share\ Price\times Current\ Basic\ Shares}$

Sales

Basic EBIT + Depreciation + Amortization

Interest Cover

Valuation Toolkit

Valuation Toolkit Numerator Denominator

Manethod Suis the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

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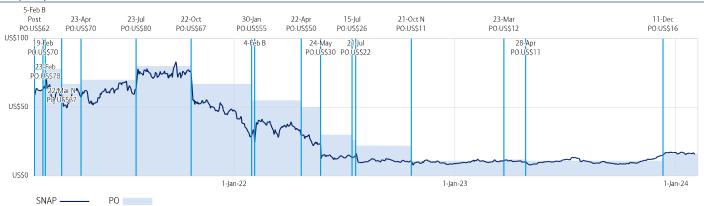
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Important Disclosures

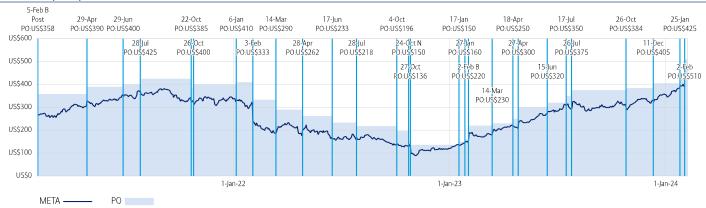
Snap Inc (SNAP) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

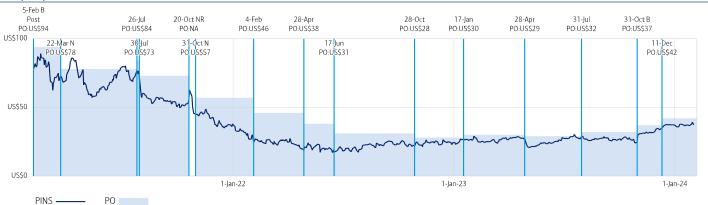
Meta Platforms (META) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Pinterest (PINS) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Equity Investment Rating Distribution: Media & Entertainment Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	35	53.85%	Buy	15	42.86%
Hold	15	23.08%	Hold	8	53.33%
Sell	15	23.08%	Sell	7	46.67%

Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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