

Amplitude, Inc.

Soft 4Q results and '24 guidance, but it looks conservative; Reiterate Buy

Reiterate Rating: BUY | PO: 14.00 USD | Price: 9.79 USD

Guidance is soft, but looks achievable

Reiterate Buy, and \$14 PO. 4Q23 results were soft as elevated churn and optimizations continue to weigh on leading growth indicators resulting in a conservative 2024 revenue growth outlook. However, customer additions were strong, giving us confidence in the traction of its newer Plus plan and PLG motion, suggesting there is revenue upside potential to guidance. While 2024 PF operating income guidance of \$500k at the midpoint represents less margin expansion (i.e., +140bps y/y versus +975bps in 2023), suggesting that the margin structure may be close to optimal to achieve near-term growth targets, we see margin upside potential driven by revenue outperformance. We revise our forecast for 4Q23 results and guidance. We lower our EV/C24E revenue multiple to 5.1x from 6x to reflect soft guidance and lower share count.

Green shoots appear, but 1H24 renewals may weigh

Commentary that early optimizers are beginning to spend again, and the risks for another optimization in the future to occur is low, suggests there is improving visibility into the pipeline, and NRR stabilizing and expanding. On balance, churn remains elevated, and 1H24 will see many two and three-year contracts coming up for renewal, which are likely be optimized at that time. This dynamic is baked into the guidance, but also implies that 2Q24 subscription could grow negative sequentially, which is a bad optic for software companies and could offset underlying good potential new business trends.

Positives: new business accelerating

1) Added 9 net-new \$1mn+ customers, bringing the total to 39 (+30% y/y), 2) landed a company record number of new enterprise logos in 4Q23, 3) 4Q23 PF op margin of 3.2% was higher than our 2.3% forecast, and represented margin expansion of 10.4pts, 4) net-new ARR of \$8mn was the highest quarterly net-add in 2023, and 5) record total net-new customers of 252 (+211% y/y), suggesting the refreshed GTM is working.

Negatives: find 5 negatives

1) NRR declined 4pts q/q to 101%, and is the sixth straight quarter of contracting NRR, and NRR could continue to compress in upcoming quarters, 2) cRPO grew (1%) y/y to \$188.5mn, and is the first time growing negative since its IPO, 3) billings growth decelerated to 8.6% y/y, from 12.7% last quarter, 4) \$100k+ ARR customers grew 6% y/y to 511, down from the 25% growth displayed for 2022, suggesting the mid-market digital native tech customer base is still under pressure.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(0.21)	0.06	0.09	0.12	0.16
GAAP EPS	(0.84)	(0.77)	(0.58)	(0.54)	(0.52)
EPS Change (YoY)	30.0%	NM	50.0%	33.3%	33.3%
Consensus EPS (Bloomberg)			0.12	0.18	NA
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	NM	163.2x	108.8x	81.6x	61.2x
EV / EBITDA*	NM	30.0x	14.6x	14.5x	12.2x
Free Cash Flow Yield*	-3.8%	2.9%	2.4%	3.3%	3.9%

* For full definitions of *IQmethod*SM measures, see page 6.

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21 February 2024

Equity

Key Changes

(US\$)	Previous	Current
2024E Rev (m)	296.7	292.4
2025E Rev (m)	323.8	310.1
2026E Rev (m)	NA	328.9
2024E EPS	0.14	0.09
2025E EPS	0.19	0.12
2026E EPS	NA	0.16

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Stock Data

Price	9.79 USD
Price Objective	14.00 USD
Date Established	10-Nov-2023
Investment Opinion	C-1-9
52-Week Range	8.50 USD - 14.47 USD
Mkt Val (mn) / Shares Out (mn)	842 USD / 86.0
Free Float	81.4%
Average Daily Value (mn)	3.43 USD
BofA Ticker / Exchange	AMPL / NAS
Bloomberg / Reuters	AMPL US / AMPLQ
ROE (2024E)	4.2%
Net Dbt to Eqty (Dec-2023A)	-109.4%
ESGMeter TM	NLA

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".

See abbreviations key on pg. 4

iQprofileSM Amplitude, Inc.

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	-6.5%	3.0%	4.5%	6.8%	8.1%
Return on Equity	-7.8%	2.4%	4.2%	6.0%	7.0%
Operating Margin	-11.0%	-1.3%	0.2%	2.0%	4.0%
Free Cash Flow	(32)	24	20	28	33

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	NM	3.7x	2.0x	2.0x	1.7x
Asset Replacement Ratio	5.7x	0.2x	0.3x	0.3x	0.3x
Tax Rate	NM	NM	NM	NM	NM
Net Debt-to-Equity Ratio	-74.1%	-109.4%	-116.1%	-112.6%	-104.8%
Interest Cover	NA	NA	NA	NA	NA

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	238	276	292	310	329
% Change	42.3%	16.1%	5.8%	6.1%	6.1%
Gross Profit	176	213	224	238	254
% Change	47.9%	20.9%	5.1%	6.5%	6.4%
EBITDA	(16)	19	40	40	48
% Change	49.5%	NM	105.7%	0.9%	18.8%
Net Interest & Other Income	4	13	13	13	13
Net Income (Adjusted)	(23)	7	11	15	20
% Change	-51.5%	NM	55.3%	34.7%	34.7%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	(93)	(90)	(70)	(66)	(64)
Depreciation & Amortization	5	6	6	6	7
Change in Working Capital	13	18	(3)	(2)	(5)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	70	92	89	91	97
Capital Expenditure	(26)	(1)	(1)	(2)	(2)
Free Cash Flow	-32	24	20	28	33
% Change	4.1%	NM	-16.1%	36.8%	17.5%
Share / Issue Repurchase	7	4	0	0	0
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	0	0	0	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	218	322	267	292	321
Trade Receivables	23	29	43	47	49
Other Current Assets	43	28	29	45	60
Property, Plant & Equipment	9	10	10	10	10
Other Non-Current Assets	120	44	36	39	53
Total Assets	414	434	384	432	492
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	109	132	146	165	177
Long-Term Debt	0	0	0	0	0
Other Non-Current Liabilities	10	7	8	8	8
Total Liabilities	119	139	154	173	185
Total Equity	295	295	230	259	306
Total Equity & Liabilities	414	434	384	432	492

* For full definitions of iQmethodSM measures, see page 6.

Company Sector

Server & Enterprise Software

Company Description

Amplitude is a software vendor that is disrupting the Digital Optimization opportunity, which we estimate to reach \$44bn by 2025. The ability to understand digital product customer journeys is complex and involves different engagement points, across different devices/time/location, which is balanced against S&M, R&D and customer service strategies. The Amplitude platform is able to ingest and analyze the data fast and efficiently, which ultimately drives better customer outcomes.

Investment Rationale

We rate AMPL Buy. We believe AMPL is an underappreciated software business that is well positioned to take share of Digital Optimization category, where it is perceived to be a leader. The volume of digital products introduced will likely increase as firms digitally transform, and AMPL helps organizations of all sizes understand end-consumer behavior and drive good user outcomes. We believe healthy demand for Amplitude should drive a growth profile higher than its infrastructure software peers.

Stock Data

Average Daily Volume 350,139

Quarterly Earnings Estimates

	2023	2024
Q1	-0.04A	0E
Q2	0.02A	0.01E
Q3	0.05A	0.04E
Q4	0.04A	0.03E

4Q23 Performance

- ARR of \$281mn was above our/Street \$273mn/\$276.5mn
- LTM NRR of 101% as compared to our/Street of 104.5%/100.3%, and in-quarter NRR was 98%
- Total revenue of \$71.4mn as compared to our/Street \$71.6mn/\$71.5mn
- PF Operating income of \$2.3mn was above our/Street \$1.6mn/\$1.6mn

FY24 Guidance

- Total revenue guidance is \$276.2-276.8mn, below our/Street \$296.7mn/\$297.1mn
- PF Operating income guidance is (\$1.0mn)-\$2.0mn, below our/Street \$7.6mn/\$6.3mn

Exhibit 1: Variance

Total revenue was 0.2% below our prior forecast

\$ in millions			
	BofA Estimate	Actual	Variance
Total Revenue	71,575	71,403	(0.2%)
Y/Y change %	9.7%	9.4%	(26bps)
Guidance (mn)	71.3-71.9		
PF Operating income	1,621	2,317	43.0%
PF operating margin	2.3%	3.2%	98bps
Guidance (mn)	1.3-1.9		
PF EPS (loss)	\$0.03	\$0.04	13.4%
Guidance (mn)	0.02-0.03		
Free cash flow	(825)	1,482	155.7%
Free cash flow margin	(1.2%)	2.1%	323bps

Source: Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 2: Estimate revisions

We lower our 2024 revenue estimate by 1.5%

	1Q24E			FY24E			FY25E			FY26E		
	New Estimate	Old Estimate	Change %	New Estimate	Old Estimate	Change %	New Estimate	Old Estimate	Change %	New Estimate	Old Estimate	Change %
Total Revenue	72,296	71,868	0.6%	292,354	296,686	(1.5%)	310,120	323,845	(4.2%)	328,937	NA	NA
Y/Y change %	8.8%	8.1%	64bps	5.8%	7.3%	(150bps)	6.1%	9.2%	(308bps)	6.1%	NA	NA
Guidance (mn)	72.1-72.7			291.5-294.5								
PF Operating income	(2,530)	1,124	(325.1%)	468	7,550	(93.8%)	6,093	14,509	(58.0%)	13,108	NA	NA
PF operating margin	(3.5%)	1.6%	(506bps)	0.2%	2.5%	(238bps)	2.0%	4.5%	(252bps)	4.0%	NA	NA
Guidance (mn)	(2.8)-(2.2)			(1.0)-2.0								
PF EPS (loss)	\$0.00	\$0.03	(1743.1%)	\$0.09	\$0.14	(67.7%)	\$0.12	\$0.19	(53.0%)	\$0.16	NA	NA
Guidance (mn)	(0.01)-0.00			0.06-0.08								
Free cash flow	14	4,794	(33935.6%)	17,495	22,114	(26.4%)	24,838	27,662	(11.4%)	29,535	NA	NA
Free cash flow margin	0.0%	6.7%	(665bps)	6.0%	7.5%	(147bps)	8.0%	8.5%	(53bps)	9.0%	NA	NA

Source: Company filings, BofA Global Research estimates

BofA GLOBAL RESEARCH

Abbreviations:



PLG = product led growth

cRPO = current remaining performance obligation

RPO = remaining performance obligation

ARR = annual recurring revenue

NRR = net revenue retention

Price objective basis & risk

Amplitude, Inc. (AMPL)

Our \$14 PO is based on 5.1x EV/C24E revenue, representing a growth adjusted multiple of 0.9x our 6% growth rate. The multiple is slightly lower than the previous multiple to account for a higher cash balance. The multiple we use is a premium to infrastructure software peers on a growth adjusted basis at 0.9x (8.2x EV/C24E revenues), warranted, in our view, due to their position as a category leader and long-term growth profile balanced against execution risks.

Risk to our PO are 1) competition, 2) premium valuation is a top risk for Amplitude's stock, 3) execution in go to market (G2M) and R&D, 4) not profitable in the near term, and 5) enterprise software spend can be highly cyclical.

Analyst Certification

I, Koji Ikeda, CFA, 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 - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	8x8	EGHT	EGHT US	Michael J. Funk
	Adobe	ADBE	ADBE US	Brad Sills
	Alarm.com	ALRM	ALRM US	Michael J. Funk
	Amplitude, Inc.	AMPL	AMPL US	Koji Ikeda, CFA
	BILL	BILL	BILL US	Brad Sills
	CCC Intelligent Solutions	CCCS	CCCS US	Michael J. Funk
	Dynatrace	DT	DT US	Koji Ikeda, CFA
	Elastic NV	ESTC	ESTC US	Koji Ikeda, CFA
	GitLab Inc.	GTLB	GTLB US	Koji Ikeda, CFA
	Global-e Online Ltd.	GLBE	GLBE US	Koji Ikeda, CFA
	HubSpot	HUBS	HUBS US	Brad Sills
	Informatica Inc.	INFA	INFA US	Koji Ikeda, CFA
	Intapp Inc.	INTA	INTA US	Koji Ikeda, CFA
	Intuit	INTU	INTU US	Brad Sills
	JFrog Ltd	FROG	FROG US	Koji Ikeda, CFA
	MeridianLink, Inc.	MLNK	MLNK US	Koji Ikeda, CFA
	Microsoft Corporation	MSFT	MSFT US	Brad Sills
	MongoDB Inc	MDB	MDB US	Brad Sills
	nCino, Inc.	NCNO	NCNO US	Adam Bergere
	NICE Ltd.	NICE	NICE US	Michael J. Funk
	NICE Ltd.	NCSYF	NICE IT	Michael J. Funk
	PagerDuty	PD	PD US	Koji Ikeda, CFA
	PowerSchool Holdings, Inc.	PWSC	PWSC US	Koji Ikeda, CFA
	RingCentral	RNG	RNG US	Michael J. Funk
	Salesforce.com	CRM	CRM US	Brad Sills
	ServiceNow	NOW	NOW US	Brad Sills
	UiPath	PATH	PATH US	Brad Sills
	Unity	U	U US	Michael J. Funk
	Weave	WEAV	WEAV US	Michael J. Funk
	Workday Inc.	WDAY	WDAY US	Brad Sills
	Zeta Global	ZETA	ZETA US	Koji Ikeda, CFA
	ZoomInfo	ZI	ZI US	Koji Ikeda, CFA
NEUTRAL				
	Autodesk	ADSK	ADSK US	Michael J. Funk
	Bentley Systems	BSY	BSY US	Michael J. Funk
	BigCommerce Holdings, Inc.	BIGC	BIGC US	Koji Ikeda, CFA
	Coveo	YCVO	CVO CN	Koji Ikeda, CFA
	Datadog Inc	DDOG	DDOG US	Koji Ikeda, CFA



US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	DocuSign	DOCU	DOCU US	Brad Sills
	Freshworks, Inc.	FRSH	FRSH US	Adam Bergere
	HashiCorp	HCP	HCP US	Brad Sills
	Jamf	JAMF	JAMF US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	LSPD	LSPD US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	YLSPD	LSPD CN	Koji Ikeda, CFA
	Oracle Corporation	ORCL	ORCL US	Brad Sills
	Paycom	PAYC	PAYC US	Adam Bergere
	Paylocity	PCTY	PCTY US	Adam Bergere
	Shopify, Inc.	SHOP	SHOP US	Brad Sills
	Snowflake	SNOW	SNOW US	Brad Sills
	Veeva Systems, Inc.	VEEV	VEEV US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
UNDERPERFORM				
	AvidXchange, Inc.	AVDX	AVDX US	Brad Sills
	Blackbaud, Inc.	BLKB	BLKB US	Koji Ikeda, CFA
	BlackLine, Inc.	BL	BL US	Koji Ikeda, CFA
	C3.ai	AI	AI US	Brad Sills
	Confluent	CFLT	CFLT US	Brad Sills
	CS Disco, Inc.	LAW	LAW US	Koji Ikeda, CFA
	Dropbox	DBX	DBX US	Michael J. Funk
	Enfusion, Inc.	ENFN	ENFN US	Koji Ikeda, CFA
	Five9	FIVN	FIVN US	Michael J. Funk
	Guidewire Software, Inc.	GWRE	GWRE US	Michael J. Funk
	Twilio	TWLO	TWLO US	Michael J. Funk
	Vertex, Inc.	VERX	VERX US	Brad Sills
RSTR				
	Splunk	SPLK	SPLK US	Brad Sills

iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity
Operating Margin
Earnings Growth
Free Cash Flow

Quality of Earnings

Cash Realization Ratio
Asset Replacement Ratio
Tax Rate
Net Debt-To-Equity Ratio
Interest Cover

Valuation Toolkit

Price / Earnings Ratio
Price / Book Value
Dividend Yield
Free Cash Flow Yield
Enterprise Value / Sales

EV / EBITDA

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income
Operating Profit
Expected 5 Year CAGR From Latest Actual
Cash Flow From Operations – Total Capex

Numerator

Cash Flow From Operations
Capex
Tax Charge
Net Debt = Total Debt – Cash & Equivalents
EBIT

Numerator

Current Share Price
Current Share Price
Annualised Declared Cash Dividend
Cash Flow From Operations – Total Capex
EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities
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
Market Cap = Current Share Price × Current Basic Shares
Sales

Basic EBIT + Depreciation + Amortization

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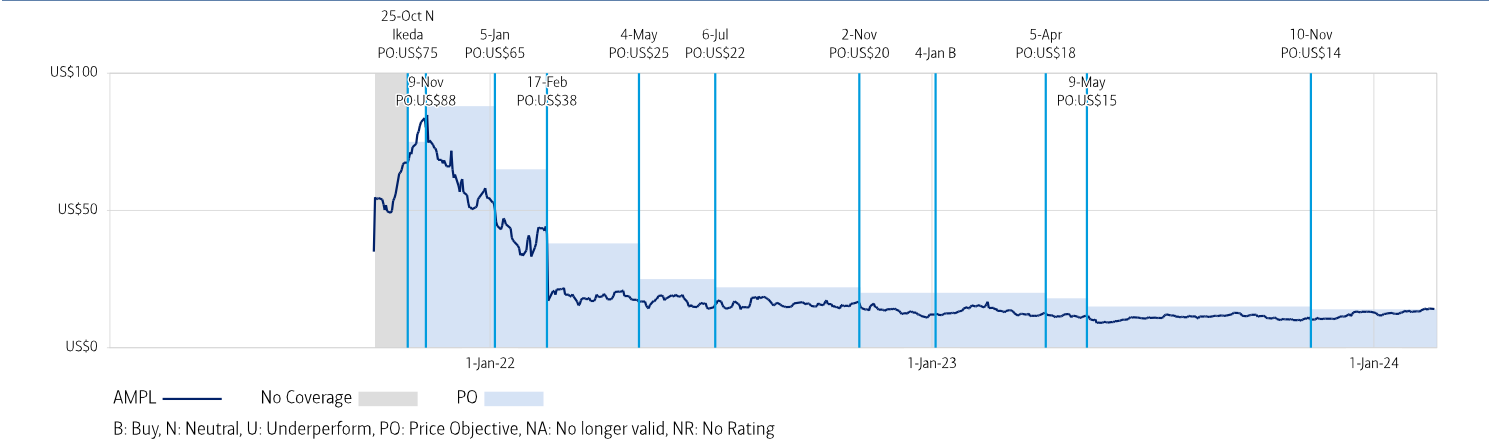
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Important Disclosures

Amplitude, Inc. (AMPL) Price Chart



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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%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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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%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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