

## Asana

## Look past growing pains – initiate at Buy

Initiating Coverage: BUY | PO: 25.00 USD | Price: 17.93 USD

## Buy ahead of upward estimate revisions

We initiate on Asana (ASAN), a leading work management platform that helps with daily tasks up to company-wide initiatives, at Buy with a PO of \$25 (39% upside). We would look beyond any short-term chopiness in key metrics, as we argue 1) Asana's go-to-market pivot to enterprises will ultimately succeed, leading topline to reaccelerate ahead of investor expectations, 2) consensus estimates look beatable, 3) investor sentiment and key metrics should turn more positive exiting 1H CY24, and 4) improving profitability is not yet reflected in valuation. See our [collaboration software primer](#) for more on the sector.

## A show-me story with attractive risk-reward

We view Asana as a show-me story with an attractive risk-reward profile at current levels. It remains significantly underpenetrated within its Core existing customers (which have approximately 80mn total employees relative to paid seat count of 3mn), providing material runway for topline growth. We are 3% and 6% above consensus revenue estimates for FY25 and FY26, respectively, and argue that key risks (such as headcount reductions in tech) are well understood by investors.

## Enterprise pivot the right move – have faith

Go-to-market reorientations take time to bear fruit, and often cause short-term valuation overhangs as investors move to the sidelines and await greater clarity. We argue, however, that now is the time to have conviction on Asana's enterprise pivot – ahead of bottoming key metrics and accelerating wallet share capture. Our analysis suggests it stands to benefit as enterprises consolidate vendors, driving churn lower and NRR/margin higher as enterprise penetration increases. Its enterprise NRR is historically 20 percentage pts higher than its firm-wide average, pointing to intensifying tailwinds to ACV growth as revenue mix shifts towards larger organizations.

## \$25 PO represents 6.4x EV/C25e revenue

Our \$25 PO is derived from a 6.4x CY2025E EV/Revenue target multiple (0.3x growth adjusted). Our growth-adjusted target multiple is in line with the high-growth software group. We believe this is warranted given Asana's multiple levers for long-term growth, partially offset by its lower margin profile.

Estimates (Jan) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	(1.16)	(0.92)	(1.04)	(0.24)	(0.16)
GAAP EPS	(1.99)	(1.63)	(2.04)	(1.16)	(1.08)
EPS Change (YoY)	-19.6%	20.7%	-13.0%	76.9%	33.3%
Consensus EPS (Bloomberg)			(1.17)	(0.24)	(0.21)
DPS	0	0	0	0	0
Valuation (Jan)					
Free Cash Flow Yield*	-3.8%	-3.2%	-4.2%	-0.7%	0.8%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 32.

26 February 2024

## Equity

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## Stock Data

Price	17.93 USD
Price Objective	25.00 USD
Date Established	26-Feb-2024
Investment Opinion	C-1-9
52-Week Range	14.32 USD - 26.27 USD
Mkt Val (mn) / Shares Out (mn)	3,976 USD / 221.8
Free Float	57.0%
Average Daily Value (mn)	31.13 USD
BofA Ticker / Exchange	ASAN / NYS
Bloomberg / Reuters	ASAN US / ASAN.N
ROE (2023E)	-74.0%
Net Dbt to Eqty (Jan-2022A)	-101.0%
ESGMeter™	Medium

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ACV = Annual Contract Value

NRR = Net Revenue Retention

APRU = Annual Revenue Per User

S&amp;M = Sales &amp; Marketing

TAM = Total Addressable Market

CWM = Collaborative Work Management

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Timestamp: 26 February 2024 06:00AM EST

# iQprofile<sup>SM</sup> Asana

## iQmethod<sup>SM</sup> – Bus Performance\*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	-24.6%	-27.7%	-33.9%	-7.2%	-5.0%
Return on Equity	-266.6%	-170.5%	-74.0%	-15.6%	-11.3%
Operating Margin	-54.3%	-41.5%	-37.9%	-9.8%	-6.8%
Free Cash Flow	(150)	(125)	(165)	(29)	32

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	NM	NM	NM	NM	NM
Asset Replacement Ratio	16.4x	4.9x	0.4x	0.7x	0.8x
Tax Rate	NM	NM	NM	NM	NM
Net Debt-to-Equity Ratio	NM	-101.0%	-134.6%	-63.0%	-73.2%
Interest Cover	NA	NM	NA	NA	NA

## Income Statement Data (Jan)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	227	378	547	650	736
% Change	59.2%	66.7%	44.6%	18.7%	13.3%
Gross Profit	199	340	493	586	662
% Change	61.7%	71.4%	44.8%	18.9%	13.0%
EBITDA	(120)	(149)	(195)	(49)	(34)
% Change	-78.4%	-24.1%	-31.0%	74.7%	31.7%
Net Interest & Other Income	1	(3)	5	14	16
<b>Net Income (Adjusted)</b>	<b>(123)</b>	<b>(163)</b>	<b>(207)</b>	<b>(53)</b>	<b>(38)</b>
<b>% Change</b>	<b>-80.7%</b>	<b>-32.1%</b>	<b>-27.2%</b>	<b>74.4%</b>	<b>28.7%</b>

## Free Cash Flow Data (Jan)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	(123)	(163)	(207)	(53)	(38)
Depreciation & Amortization	3	8	13	14	16
Change in Working Capital	23	46	13	(15)	30
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	4	25	21	36	37
Capital Expenditure	(57)	(42)	(5)	(10)	(13)
<b>Free Cash Flow</b>	<b>-150</b>	<b>-125</b>	<b>-165</b>	<b>-29</b>	<b>32</b>
<b>% Change</b>	<b>-219.5%</b>	<b>16.5%</b>	<b>-31.9%</b>	<b>82.7%</b>	<b>NM</b>
Share / Issue Repurchase	20	17	6	5	5
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	31	7	11	(3)	(3)

## Balance Sheet Data (Jan)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	260	240	527	249	294
Trade Receivables	32	59	82	90	111
Other Current Assets	154	112	51	322	325
Property, Plant & Equipment	74	100	95	99	101
Other Non-Current Assets	211	196	200	208	214
<b>Total Assets</b>	<b>731</b>	<b>707</b>	<b>955</b>	<b>968</b>	<b>1,046</b>
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	163	255	332	369	430
Long-Term Debt	30	35	47	44	41
Other Non-Current Liabilities	551	213	219	230	230
<b>Total Liabilities</b>	<b>744</b>	<b>503</b>	<b>598</b>	<b>643</b>	<b>700</b>
<b>Total Equity</b>	<b>(13)</b>	<b>204</b>	<b>357</b>	<b>325</b>	<b>345</b>
<b>Total Equity &amp; Liabilities</b>	<b>731</b>	<b>707</b>	<b>955</b>	<b>968</b>	<b>1,046</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 32.

## Company Sector

Server & Enterprise Software

## Company Description

Asana is a work management platform that helps teams orchestrate work, from daily tasks to cross-functional strategic initiatives.

## Investment Rationale

Our Buy rating is largely based on our view that 1) Asana's go-to-market pivot to enterprises will ultimately succeed, leading topline to reaccelerate ahead of investor expectations, 2) consensus estimates look beatable, 3) investor sentiment and key metrics are likely to improve, and 4) improving profitability is not yet reflected in valuation.

## Stock Data

Average Daily Volume 1,735,930

## Quarterly Earnings Estimates

	2022	2023
Q1	-0.21A	-0.30A
Q2	-0.23A	-0.34A
Q3	-0.23A	-0.26A
Q4	-0.25A	-0.15E

## Show-me story – attractive risk/reward

**Initiating coverage with a Buy rating and \$25 PO.** Asana is a leading work management platform that helps teams orchestrate work, from daily tasks to cross-functional strategic initiatives. We expect near-term chopiness in reported key metrics as Asana develops its enterprise go-to-market muscle. However, we view the company as a show-me story with an attractive risk-reward profile at current levels, and recommend investors buy the stock ahead of positive estimate revisions. The company's increasing focus on the enterprise market looks prudent given the clear unit economics benefits. As revenue mix increasingly shifts towards its base of enterprise customers, there should be a natural uplift to firm-level gross retention, ARPU/ACV, and expansion momentum. Incremental revenue generation should also increasingly skew toward renewal/expansion and away from new logo additions, contributing to greater S&M efficiency and profitability.

Our analysis suggests that sentiment is bottoming. Investor confidence was shaken in 2023 as go-to-market challenges mounted and seat count rationalization within the tech vertical intensified. However, we believe the risks are now well-understood and we expect key metrics to bottom in the first half of CY2024. We are modeling revenues 3% and 6% above consensus for FY25e and FY26e, respectively, reflecting our confidence in Asana's ability to increase the traction of its top-down/enterprise sales motion.

Asana has significantly expanded margins over the last 18 months. We expect the company to exit FY25 with a non-GAAP operating margin 36 percentage points higher than FY23. It has committed to delivering positive free cash flow by the end of calendar 2024, a goal we view as beatable ahead of schedule. Asana's reinvigorated focus on profitability has made it a significantly more investable stock in the current market environment. However, its clear improvement in financial profile has yet to be appropriately reflected in its valuation, in our view.

### Investment positives

#### **Increasing focus on enterprise market likely to yield improving unit economics.**

Asana's focus is squarely on increasing enterprise penetration, which should drive tangible improvements in unit economics in the long term. We expect its march upmarket to create stickier customer relationships and ARPU uplift, reducing reliance on gross paying user additions to fuel growth and contributing to outsized margin expansion relative to peers.

#### **Large and underpenetrated market growing in the mid-teens through 2026.**

Asana is recognized as a leader in a large and growing market, and remains underpenetrated within its Core (\$5K+ in annual contract value) existing customers. For example, these customers have approximately 80mn employees (relative to the company's paid seat count of 3mn).

**We expect self-help stories to outperform in 2024.** We think self-help stories that are on the mend are likely to outperform in 2024. We define self-help stories as businesses that have gone through or are currently undergoing a business model transition (slower growth, higher profits, go-to-market strategy shifts, technology offering shifts), and/or that have been disproportionately affected by the macro, which is resulting in growth and/or profitability fundamentals that do not fully reflect the true potential of the business. We believe Asana fits squarely into the self-help story category.

**Profitability improvements not yet reflected in valuation.** Asana has delivered impressive margin expansion over the past 18 months, entering CY24 with a much leaner cost structure. We argue that these improvements are not yet reflected in valuation – Asana's EV/Revenue multiple has remained relatively flat since mid-CY2022.



**CEO's conviction offers support to valuation.** We are positive on the conviction with which Founder, CEO, and Chair of the Board Dustin Moskowitz has continued to purchase Asana shares.

**We think Asana is a vendor consolidation beneficiary.** Asana noted at 3Q24 earnings that it is seeing more multi-year deals (up both sequentially and Y/Y), and it is winning on vendor consolidation decisions (enterprises previously using multiple collaboration software vendors are moving seats onto Asana). We view it as a likely beneficiary of accelerating vendor consolidation trends within the category.

## Investment risks

**Slower growth than public CWM peers could give investors pause.** We expect Asana's topline growth to lag public competitors in CY2024, primarily due to its go-to-market reorientation. Muted growth relative to public competitors could weigh on investor sentiment.

**CEO's ownership limits outside shareholder influence/M&A potential.** Form 4 filings suggest that President, CEO, and Chair of the Board Dustin Moskowitz owns approximately 38% of Asana's common stock outstanding. While we view his involvement in the company positively, his significant ownership stake could limit the influence of other shareholders and reduces the likelihood that Asana would be an M&A target.

**Profitability still lags peers.** While Asana has made significant progress on profitability, it has historically not generated positive cash flows. Increasing investor emphasis on profitability could cause the stock to underperform shorter-duration names in the category. With most of the low-hanging fruit for expense reduction likely addressed and a potential reacceleration of marketing spend on the horizon, we expect limited incremental cost leverage in the near term.

**Increasingly competitive landscape.** The CWM software market is increasingly competitive with several major players vying for share and new entrants attempting to disrupt. In addition, a growing number of competitors are revamping efforts to increase penetration of the enterprise market.

**Go-to-market reorientation could cause choppiness in metrics.** Go-to-market (GTM) reorientations often take time to bear fruit. We see some risk of near-term choppiness in reported key metrics as Asana develops its enterprise go-to-market muscle. There are several moving pieces associated with its evolving GTM including leadership changes and the introduction of new pricing and packaging.

**Continued layoffs in the tech industry could present challenges in CY24.** Asana has significant exposure to the technology vertical (we believe approximately 30% of revenues). Continued layoffs in its end-markets could increase down-sell pressure at renewal as some customers may right-size license needs.

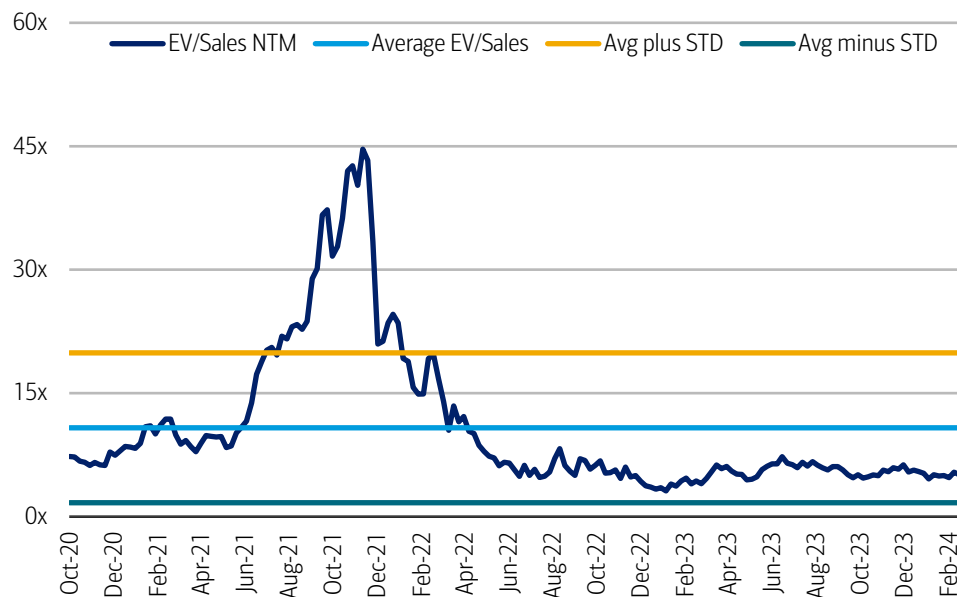
## Valuation: \$25 PO, 39% upside

### Re-rating in prospect as reorientation takes shape

ASAN has pulled back from its peak 2021 EV/Revenue multiple and is now trading almost a full standard deviation below its average since its IPO. We believe it is well-positioned to grow revenues at a CAGR of 19% through FY27 while expanding operating margins by roughly 600bps per year. We expect the shares to re-rate higher as key metrics bottom and Asana's go-to-market reorientation begins to take shape in the coming quarters.

#### Exhibit 1: Asana is trading 53% below its historical average on EV/Rev

ASAN EV/Rev since IPO



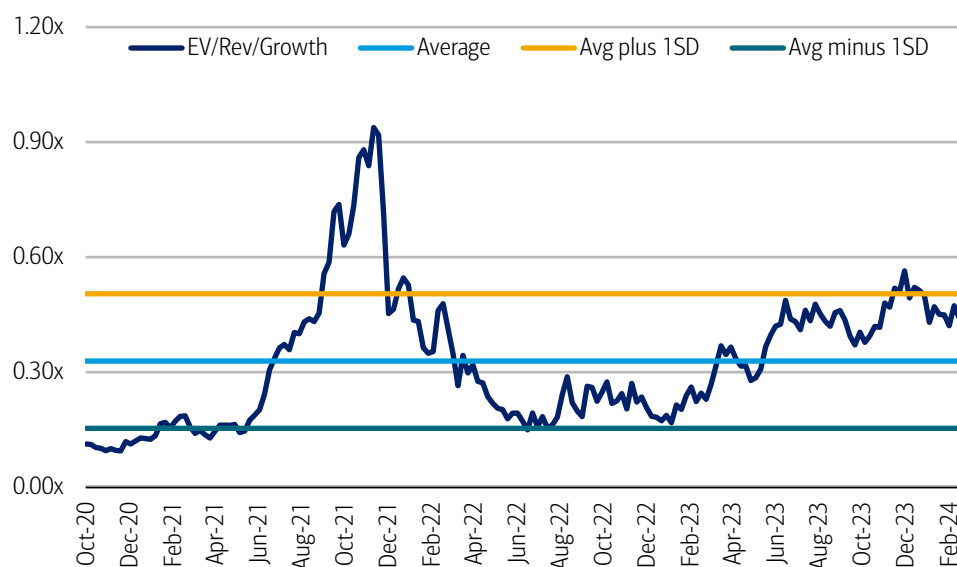
Source: BofA Global Research, Bloomberg

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EV/Rev/G is also relevant on a historical and comparable basis, in our view. ASAN is trading above its average EV/Rev/G multiple since its IPO (due to short-term growth headwinds, in our view). A valuation multiple above the company's historical range is warranted, in our view, given significant improvements in profitability and long-term growth potential.

**Exhibit 2: Asana is trading above its historical EV/Rev/Growth multiple due to short-term growth headwinds**

Asana EV/Rev/G since its IPO



Source: BofA Global Research, Bloomberg

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**Comps: discount to CWM peers**

We leverage comparable analysis to derive our current PO, supported by a DCF valuation. In our view, ASAN is best compared against three different groups: CWM software peers, high-growth (20%+) software, and the horizontal SaaS group. ASAN is currently trading at CY25 EV/Rev and EV/Rev/G multiples of 4.6x and 0.4x, respectively, relative to the CWM software peer group averages of 5.1x and 0.3x, respectively.

**Exhibit 3: Asana trades below collaboration software peer averages for EV/CY2025 Sales**

Comp table for CWM software vendors

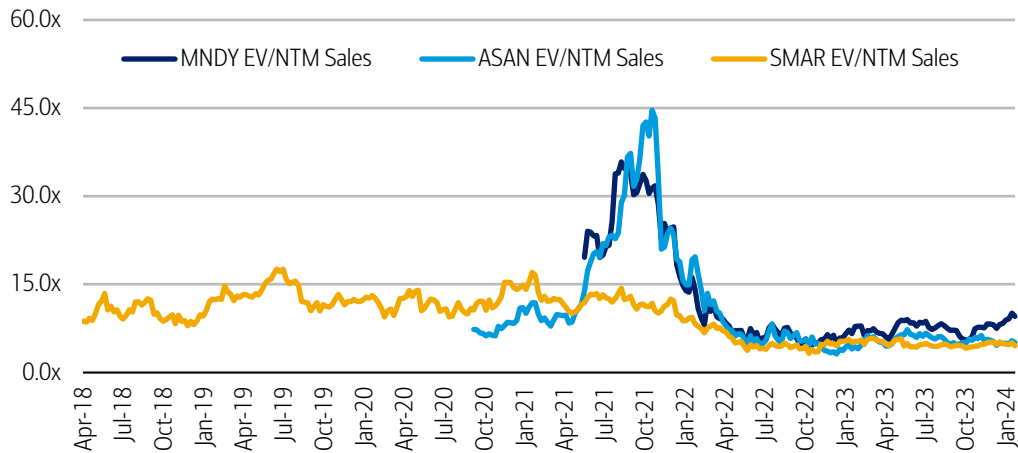
Ticker	Company name	Mkt Cap (\$mn)	2023 Rev Growth	2024 Rev Growth	2025 Rev Growth	EV/2023 Sales	EV/2024 Sales	EV/2025 Sales	2023 EV/Rev/Growth	2024 EV/Rev/Growth	2025 EV/Rev/Growth	2023 PF Op Margin	2024 PF Op Margin	2025 PF Op Margin	EV/2023 FCF	EV/2024 FCF	EV/2025 FCF
ASAN	ASANA INC	3,970	20%	11%	13%	5.8x	5.2x	4.6x	0.3x	0.5x	0.4x	(11%)	(8%)	(2%)	...	...	57.5x
MNDY	MONDAY.COM	9,114	41%	28%	27%	11.0x	8.6x	6.8x	0.3x	0.3x	0.3x	8%	7%	8%	39.3x	39.5x	30.0x
SMAR	SMARTSHEET	5,682	26%	20%	20%	5.5x	4.6x	3.8x	0.2x	0.2x	0.2x	8%	10%	13%	39.8x	30.1x	19.6x
TEAM	ATLASSIAN	53,124	22%	18%	23%	13.6x	11.5x	9.3x	0.6x	0.6x	0.4x	22%	20%	22%	49.4x	47.5x	36.2x
Average		6,255	29%	20%	20%	7.4x	6.1x	5.1x	0.3x	0.3x	0.3x	2%	3%	6%	39.5x	34.8x	35.7x
Median		5,682	26%	20%	20%	5.8x	5.2x	4.6x	0.3x	0.3x	0.3x	8%	7%	8%	39.5x	34.8x	30.0x

Source: BofA Global Research, Bloomberg for non-covered companies

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**Exhibit 4: Asana has traded at both discounts and premiums to collaboration software peers**

Historic EV/Sales multiples of collaboration software vendors since IPO

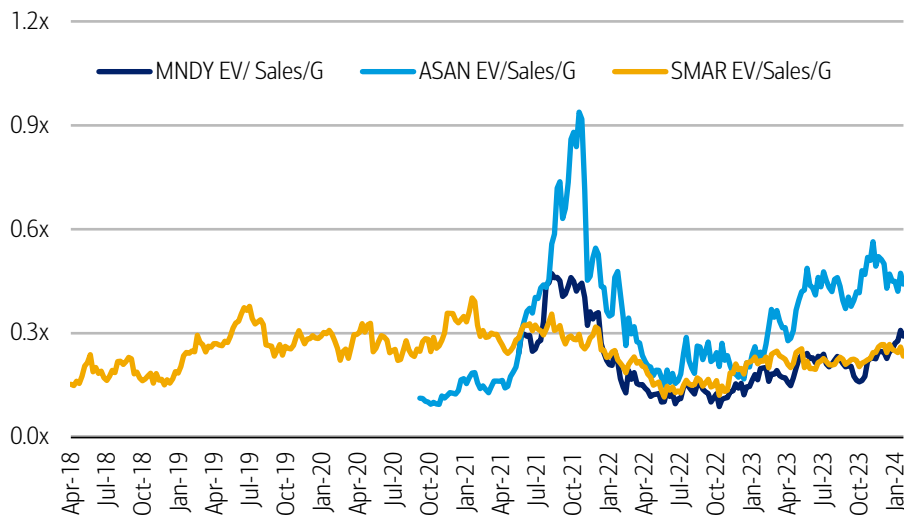


Source: BofA Global Research, Bloomberg

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**Exhibit 5: Asana is trading at a higher EV/Sales/G multiple relative to collaboration software peers**

Historic EV/Sales/G multiples of collaboration software vendors since IPO



Source: BofA Global Research, Bloomberg

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Please see the appendix for comp tables for the high growth (20%+) software and the horizontal SaaS groups.

## DCF analysis supports our PO

Alternatively, we present a 10-year DCF, which supports our \$25 PO. We recognize that the longer-term time horizon presents a higher degree of uncertainty to assumptions, and projections for moderately decelerating revenue growth through the forecast period underscore the risks related to execution and the current valuation.

Our model assumes that ASAN's non-GAAP operating margin reaches 8.3% over the next four years in FY27E and expands roughly 340bps per year until reaching a terminal margin of 32%. Our analysis has a 17% revenue CAGR over the forecast period and a terminal free cash flow margin of 25%. We use a 13% WACC, 4% risk free rate, and a 4% terminal growth rate for our assumptions.

### Exhibit 6: Our discounted cash flow analysis supports our \$25 PO

Asana discounted cash flow analysis

(\$Ms, except per share)	FY23A	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E	FY33E	TV	CAGR
<b>Revenues</b>	<b>\$547</b>	<b>\$650</b>	<b>\$736</b>	<b>\$898</b>	<b>\$1,104</b>	<b>\$1,341</b>	<b>\$1,608</b>	<b>\$1,904</b>	<b>\$2,236</b>	<b>\$2,603</b>	<b>\$3,004</b>	<b>\$3,124</b>	<b>17.2%</b>
Growth	44.6%	18.7%	13.3%	22.1%	22.9%	21.4%	19.9%	18.4%	17.4%	16.4%	15.4%	4.0%	
Operating income	(207)	(63)	(50)	3	92	165	263	387	522	685	881	\$1,010	
% margin	-37.9%	-9.8%	-6.8%	0.3%	8.3%	12.3%	16.3%	20.3%	23.3%	26.3%	29.3%	32.3%	
Cash interest expense (income), net	2	4	4	4	4	4	4	4	4	4	4	\$4	
Cash taxes	4	4	4	3	3	8	13	19	36	55	79	\$221	
Tax rate	-2.1%	-5.9%	-7.2%	-304.0%	3.0%	5.0%	5.0%	5.0%	7.0%	8.0%	9.0%	22.0%	
Capex	(\$5)	(\$10)	(\$13)	(\$16)	(\$20)	(\$24)	(\$29)	(\$34)	(\$40)	(\$46)	(\$53)	(\$53)	
D&A	\$13	\$14	\$16	\$20	\$24	\$24	\$29	\$34	\$40	\$46	\$53	\$53	
Change in working capital	\$13	(\$15)	\$30	\$29	\$30	\$27	\$32	\$0	\$0	\$0	\$0	\$0	
Other Adjustments	\$25	\$49	\$52	\$51	\$49	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Free cash flow</b>	<b>(\$167)</b>	<b>(\$34)</b>	<b>\$27</b>	<b>\$79</b>	<b>\$169</b>	<b>\$180</b>	<b>\$278</b>	<b>\$364</b>	<b>\$481</b>	<b>\$627</b>	<b>\$798</b>	<b>\$785</b>	
Growth		NM	-180%	189%	115%	7%	54%	31%	32%	30%	27%	-1.7%	
Margin	-31%	-5%	4%	9%	15%	13%	17%	19%	22%	24%	27%	25%	
Discounted FCF		(\$30)	\$21	\$55	\$105	\$100	\$136	\$159	\$186	\$216	\$244		
Cumulative cash flow	\$1,192												
Terminal value	\$4,797												
<b>Total DCF value</b>	<b>\$5,989</b>												
Debt	\$45												
Cash & ST investments	\$530												
<b>Market value of equity</b>	<b>\$6,474</b>												
Shares outstanding	250												
<b>Equity value per share</b>	<b>\$25.88</b>												

Source: BofA Global Research

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## 4M framework supports bullish view

- **Market:** ASAN addresses a large and growing \$12.5bn+ market, where it is considered a leader with over \$666mn in ARR, 3.0mn+ paid seats, and 146K+ total paying customers.
- **Moat:** Asana's platform is both easy to adopt and flexible, with thousands of potential use cases. The company has a passionate base of users that are often willing to evangelize the product across departments within their organizations. Gross logo retention for Asana's enterprise customer base is typically in the mid-to-high 90s, and enterprise gross dollar retention ranges from the mid-80s to high-90s. However, we note that overall company gross logo and dollar retention are likely much lower than reported enterprise metrics. Asana has some of the largest deployments in the category (with its biggest deployments for 200,000+ seats).
- **Margin:** ASAN's non-GAAP operating margin increased from -54.3% in FY21 to -37.9% in FY23 and we are modeling operating margins of -9.8% for FY24. Long-term, we believe ASAN's ability to upsell customers for additional services/add-ons should lead to margin improvement with additional scale.
- **Management:** We believe ASAN's management team is strong, and view CEO Dustin Moskovitz and CFO Tim Wan's extensive C-suite level experience favorably. We also view Mr. Moskovitz's consistent purchasing of Asana stock, hands-on involvement in company operations, and prior experience as a co-founder of Facebook positively.

### Market: Collaborative work TAM to reach \$18.9bn by 2026

We provide TAM estimates based on a combination of 3<sup>rd</sup>-party, top-down, and bottom-up estimates. Based on our top-down analysis, we expect the collaborative work management TAM to reach roughly \$18.9bn by 2026, growing at a CAGR of 14.9% from approximately \$12.5bn in 2023.

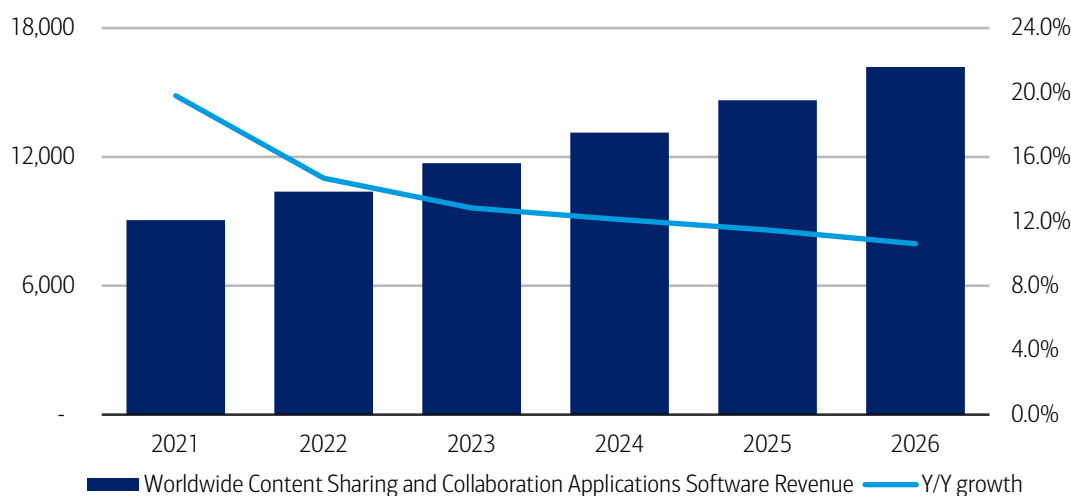
#### Third-party TAM estimates: moderating growth as IT budgets tighten

According to IDC, the global content sharing and collaboration applications software market is expected to reach \$16.2bn by 2026, growing at a CAGR of 11.7% from \$10.4bn in 2022. We flag that – according to IDC estimates – the CWM software category is transitioning from a period of mid-teens growth to low double-digit growth. This trend is in line with actions taken by several vendors to reorient cost structures and grow more 'responsibly' following years in which share capture was the top priority. This shift has largely arisen due to increasing investor focus on profitability given macro pressures and an elevated interest rate environment, and tighter IT budgets which have muted new logo growth and expansion opportunities.



**Exhibit 7: Worldwide spending on content sharing and collaboration applications software is expected to reach \$16.2bn by 2026**

Worldwide content sharing and collaboration applications software revenue



Source: BofA Global Research, IDC

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**Top-down TAM estimates**

We calculate a top-down TAM estimate for the CWM software market based on global knowledge worker, ARPU and penetration assumptions. We apply an annual ARPU assumption of \$126 for 2023 based on an analysis of various vendor pricing and packaging plans, and assume 6% annual expansion for inflation and the introduction of incremental functionality (we view 6% as conservative given higher historical category ARPU growth). We assume that approximately 9.0% of global knowledge workers leverage CWM software today, expanding to 10.5% by 2026 as the category matures. Based on these assumptions, we expect the CWM software TAM to reach \$18.9bn by 2026, expanding at a CAGR of 14.9% from \$12.5bn in 2023.

**Exhibit 8: Applying a top-down framework, we estimate the global CWM software market could reach \$18.9bn by 2026**

Top-down estimate for the global CWM software TAM based on global knowledge workers, ARPU, and penetration

	2023E	2024E	2025E	2026E
Global knowledge workers (thousands)	1,100,000	1,133,000	1,166,990	1,202,000
Y/Y growth		3.0%	3.0%	3.0%
ARPU (annual, \$)	126	134	142	150
Y/Y growth		6.0%	6.0%	6.0%
Implied TAM assuming 100% global adoption of CWM software	138,600,000	151,323,480	165,214,975	180,381,710
% penetration of knowledge workers	9.0%	9.5%	10.0%	10.5%
Implied TAM (\$, thousands)	12,474,000	14,375,731	16,521,498	18,940,080
Y/Y TAM growth		15.2%	14.9%	14.6%

Source: BofA Global Research

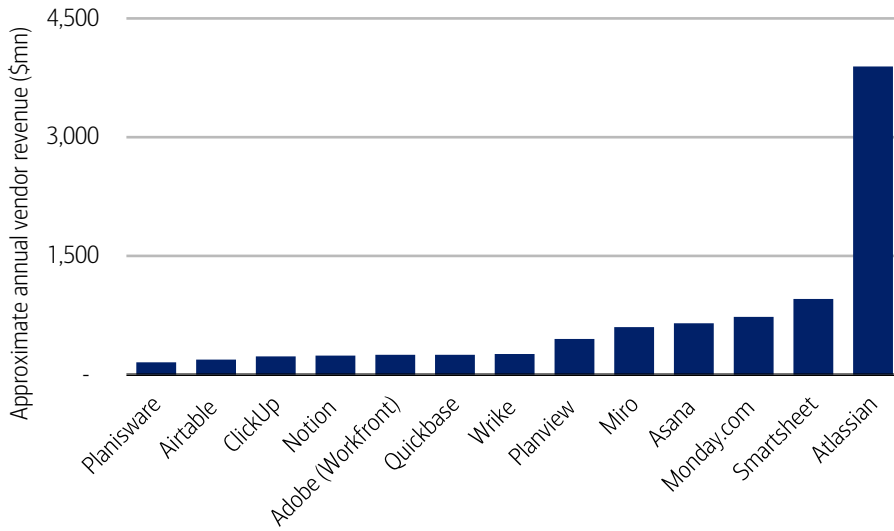
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**Bottom-up TAM represents lower limit for addressable market**

We estimate a bottom-up TAM estimate for the CWM software market based on the reported and estimated revenues of key competitors. We view our bottom-up TAM analysis as conservative, and recommend investors use this figure as a lower limit for the CWM software addressable market. The total estimated revenue of the 14 vendors listed below sums to \$8.9bn. We note that 1) in some cases the figures listed below include revenues from products that wouldn't be considered direct equivalents to the products offered by Asana, monday.com, and Smartsheet (for example, Atlassian's Bitbucket product), and 2) revenues from vendors like Microsoft have been omitted given challenges associated with estimating revenue run rates.

**Exhibit 9: We estimate that the CWM software vendors below generate almost \$9bn in annual revenues in aggregate**

Bottom-up TAM estimate based on reported and estimated vendor revenue



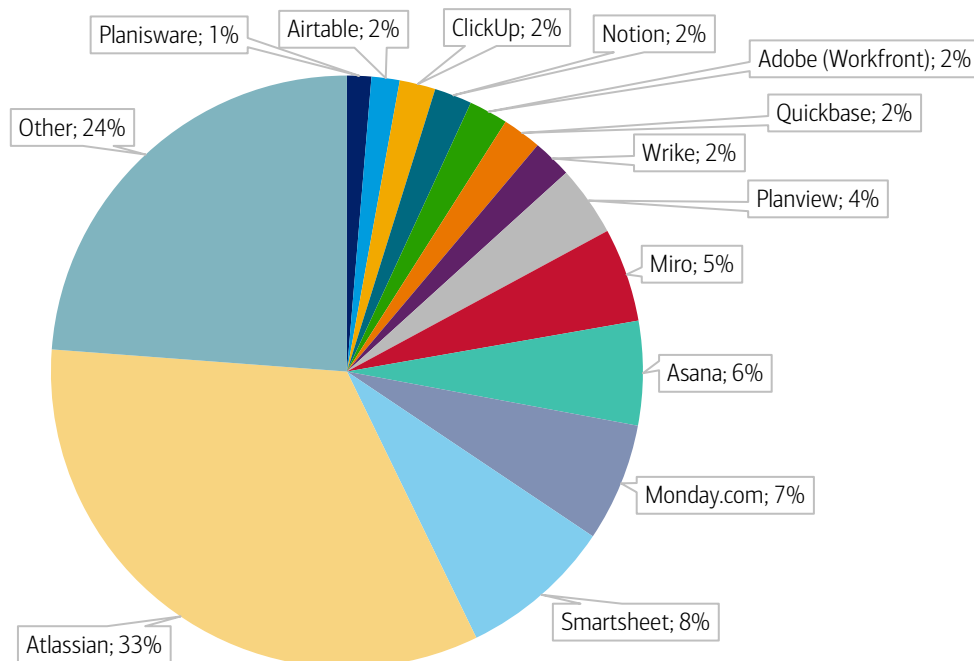
Source: BofA Global Research estimates, company filings

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We estimate market share leveraging a combination of IDC estimates for total category revenues and reported/estimated vendor sales. We note that CWM software revenues for vendors like Microsoft are included in Other given challenges associated with estimating revenue run rates. While Atlassian is the clear market share leader within the collaboration software category, its products focus on developers more than non-technical business users. We believe this provides ample opportunity for vendors like Asana, monday.com, and Smartsheet to consolidate share within the business-user focused CWM market.

**Exhibit 10: Atlassian, Smartsheet, monday.com, and Asana have the largest share of the fragmented CWM software market**

Approximate market share of vendors within the CWM category



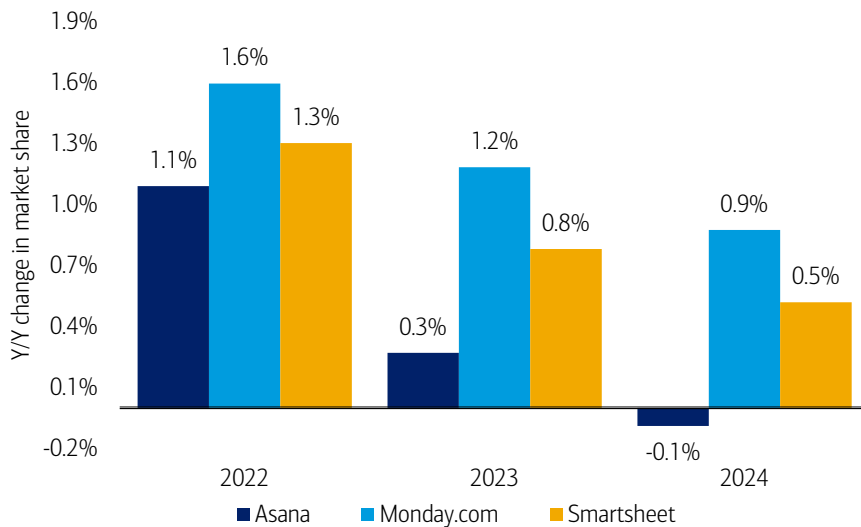
Source: BofA Global Research

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We note that Asana, monday.com, and Smartsheet each captured market share during CY2022 and CY2023, with monday.com gaining the most. This reflects differentiated offerings and go-to-market infrastructure relative to most private vendors, in our view. Consensus estimates suggest Asana is expected to be a share donor in 2024 given its go-to-market reorientation, but this trend is expected to reverse in 2025. The following chart summarizes the evolving market share dynamics between Asana, monday.com and Smartsheet.

### Exhibit 11: Consensus estimates suggest Asana could be a market share donor in 2024, with monday.com taking share most rapidly

Approximate Y/Y change in market share for Asana, monday.com, and Smartsheet for 2022, 2023, and 2024E



Source: BofA Global Research, IDC, Visible Alpha

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### Moat: unique Work Graph and ease of use/adoption

Asana's competitive moat stems from its 1) Work Graph (uniquely architected graph-based data model), 2) passionate user base, and 3) ease of adoption and flexibility.

Graph data modeling is the process whereby a user describes an arbitrary domain as a connected graph of nodes and relationships with properties and labels.

#### Ease of use and adoption

Asana's platform is both easy to adopt and flexible, with thousands of potential use cases. Its malleability and ease of use empowers business users to create and adapt business apps customized for specific workflows, projects, or processes. Asana can often alleviate customer pain points, resulting in particularly passionate users who act as evangelists within organizations. Affordable pricing on a per seat basis also makes experimenting with the platform easy.

#### Gross retention lower than most software peers, but improving

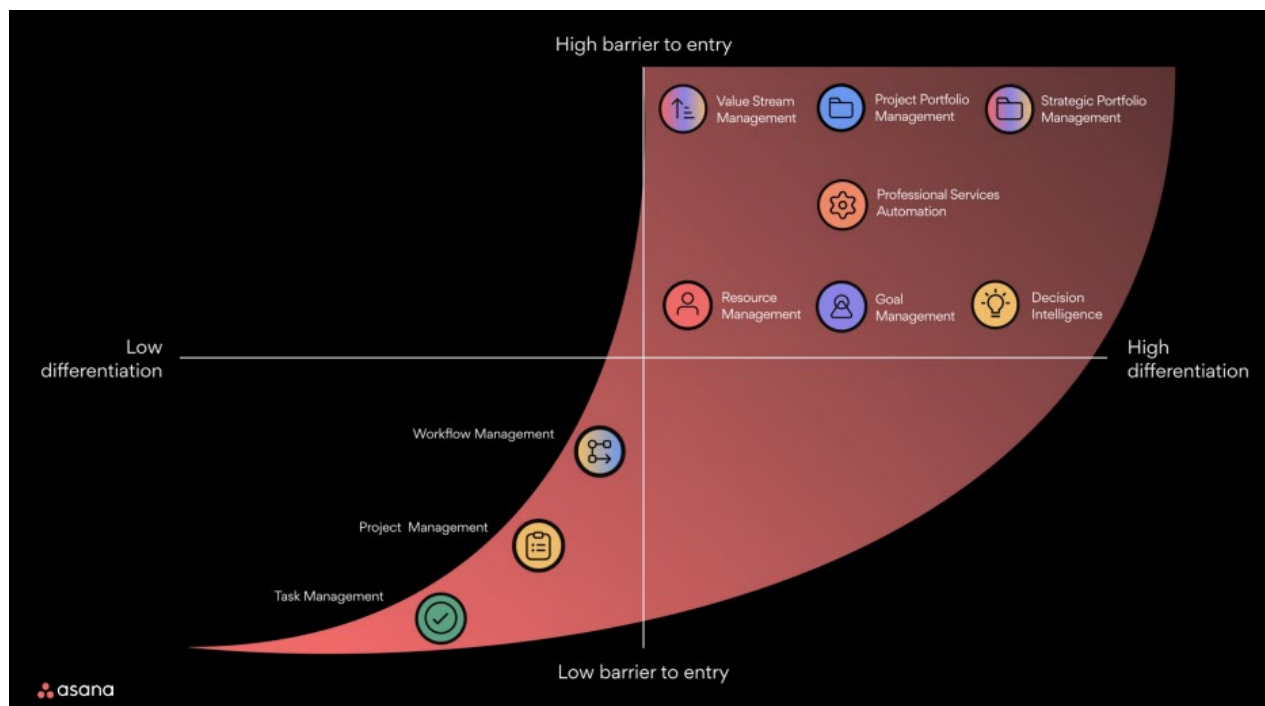
Gross logo retention for Asana's enterprise customer base is typically in the mid-to-high 90s, and enterprise gross dollar retention ranges from the mid-80s to high-90s. However, we note that overall company gross logo and dollar retention are likely much lower than reported enterprise metrics.

#### Asana is a strong option for Enterprise deployments

Asana has some of the largest deployments in the category, suggesting to us that enterprise customers often have a high degree of confidence in the company as a long-term partner. Asana views its Work Graph as the biggest source of competitive differentiation and main driver of customers standardizing on Asana wall-to-wall. It helps companies get their data in order so they can be AI-ready and drive more strategic value.

**Exhibit 12: Capabilities like strategic portfolio management and decision intelligence provide the best opportunities for differentiation**

We present Asana's chart summarizing the potential for differentiation within CWM software based on capability



Source: Asana presentation

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## Management: pedigree and involvement support shares

### Dustin Moskovitz – Co-Founder, President, Chief Executive Officer, and Chair

Dustin Moskovitz co-founded Asana and has served as a member of the board of directors since December 2008, as Chief Executive Officer since October 2010, as President since February 2019, and as Chair since December 2019. Previously, he served as Asana's Chief Financial Officer from February 2009 to January 2017, and as the company's Secretary from February 2009 to October 2017. Prior to Asana, Mr. Moskovitz co-founded Facebook, Inc., and from February 2004 to November 2008, he served in a variety of senior roles, including Chief Technology Officer and Vice President of Engineering. He attended Harvard University where he studied economics.

Mr. Moskovitz owns a significant percentage of Asana's common stock – at 38% of total shares outstanding. Further, in our view, Mr. Moskovitz's consistent purchasing of Asana stock, hands-on involvement in company operations, and prior experience as a co-founder of Facebook has positively influenced Asana's valuation.

### Tim Wan – Chief Financial Officer

Tim Wan has served as Asana's Chief Financial Officer since January 2017, and previously as Secretary from May 2018 to September 2019. Prior to joining Asana, Mr. Wan served as the Chief Financial Officer of Apigee Corporation, an API platform technology company, from March 2015 to January 2017. From June 2000 to February 2015, he served in a variety of senior roles at RealNetworks, Inc., a digital media and applications company, including as Senior Vice President, Chief Financial Officer, and Treasurer from April 2012 to February 2015. He also served as Vice President, Finance from September 2009 to April 2012 and in various other leadership positions from June 2000 to August 2009.

## Margin: significant progress in trailing 12 months

Asana's adjusted gross margin in FY23 was 90.1%, up 20 bps Y/Y from 89.9% in FY22. While we model limited incremental gross margin expansion from here, we note that Asana's gross margin profile is robust relative to peers in CWM software. Asana's adjusted operating margin improved from -41.5% in FY22 to -37.9% in FY23 driven by leverage in research and development (R&D) and general and administrative (G&A) expenses. We note that S&M expenses increased as a percentage of revenue in FY23 to 67.6% (from 66.6% in FY22) as the company continued to invest in topline growth. However, S&M intensity decreased to 49.6% of revenues in 3Q24.

### Exhibit 13: We expect Asana to deliver non-GAAP OpM improvement of 28% in FY24

Summary of Asana margins

Margin analysis (non-GAAP)	FY22A	FY23A	1Q24A	2Q24A	3Q24A	4Q24E	FY24E	1Q25E	2Q25E	3Q25E	4Q25E	FY25E	FY26E	FY27E
Gross margin	89.9%	90.1%	90.5%	90.3%	90.6%	89.6%	90.2%	90.0%	90.0%	90.0%	90.0%	90.0%	89.0%	89.0%
<b>Operating margin</b>	<b>-41.5%</b>	<b>-37.9%</b>	<b>-14.6%</b>	<b>-6.4%</b>	<b>-5.9%</b>	<b>-12.4%</b>	<b>-9.8%</b>	<b>-13.0%</b>	<b>-8.5%</b>	<b>-5.0%</b>	<b>-1.5%</b>	<b>-6.8%</b>	<b>0.3%</b>	<b>8.3%</b>
Adjusted EBITDA margin	-39.3%	-35.6%	-12.5%	-4.2%	-3.8%	-10.2%	-7.6%	-10.8%	-6.3%	-2.8%	0.7%	-4.6%	2.5%	10.5%
Net margin	-43.0%	-37.9%	-12.1%	-5.2%	-4.9%	-10.7%	-8.2%	-11.3%	-6.9%	-3.4%	0.0%	-5.1%	1.7%	9.5%
FCF margin	-33.4%	-30.6%	-11.3%	9.0%	-6.9%	-11.9%	-5.3%	-2.6%	13.4%	-0.7%	4.5%	3.7%	8.7%	15.3%

Source: BofA Global Research, company filings

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We expect operating margin improvement to be primarily driven by incremental scale efficiencies, the company's march upmarket, incremental cost discipline, positive skew towards renewals over new logo additions, and leverage in S&M. We expect significant operating margin improvement in FY24 and FY25 and are modeling -9.8% and -6.8%, respectively, representing expansion of 28 pct pts and 3 pct pts.

We expect Asana's march upmarket to create stickier customer relationships and ARPU uplift, reducing reliance on gross paying user additions to fuel growth and contributing to outsized margin expansion relative to peers. Over time, we also expect incremental scale benefits and a shift in Asana's growth algorithm towards expansion/upsell and away from new logo additions to result in natural margin expansion. The company has committed to delivering positive free cash flow by the end of calendar 2024, and is targeting FCF margins of 30%+ in the long term.

### Exhibit 14: Asana's long-term target model includes OpMs of 20%+ and FCF margins of 30%+

Asana long-term financial target summary

Balancing growth and profitability			
% of revenue (Non-GAAP)	1H FY24	Medium Term	Long Term
Gross margin	90%	88%+	88%+
R&D	33%	28-31%	22-25%
S&M	51%	47-50%	30-33%
G&A	17%	10-13%	8-9%
Operating margin	(10)%	(6)-4%	20%+
Free cash flow margin	(1)%	Positive	30%+

Source: company filings

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## Company description

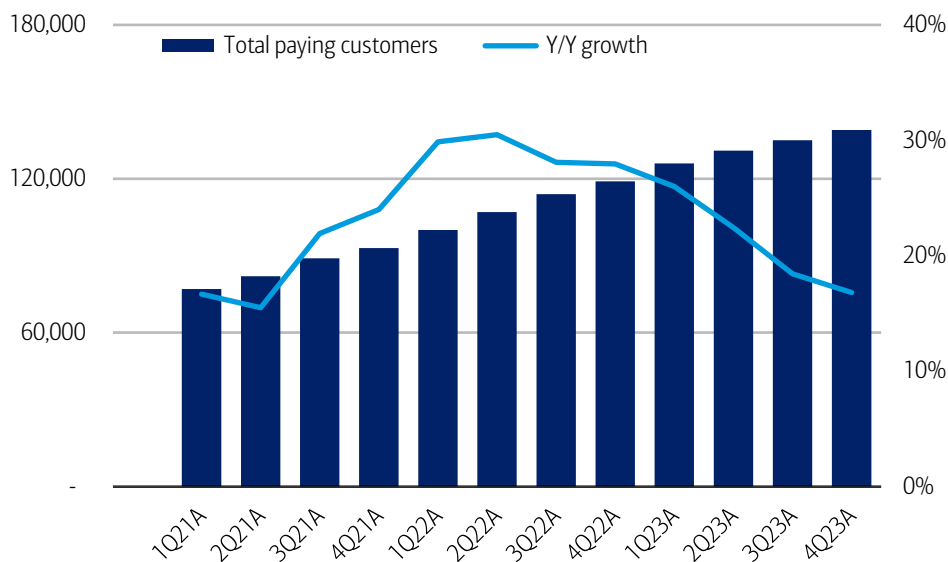
Asana is a work management platform that helps teams orchestrate work, from daily tasks to cross-functional strategic initiatives. The company was incorporated in the state of Delaware on December 16, 2008, and is headquartered in San Francisco, California. Asana has an impressive customer base, with 70% of the Fortune 500 and notable companies such as Amazon, Roche, Accenture, and T-Mobile.

### Customer base: rapid adoption – more than 3mn+ paid users today

Since its inception, over 42mn users (and millions of teams) have registered on Asana. Users experience higher productivity and engagement, which has led to rapid adoption across teams, departments, and organizations. Today, Asana has over 146,000 total customers and 3mn+ paid users.

#### Exhibit 15: Asana has scaled its total paying customer count rapidly

Asana total paying customers and Y/Y growth



Source: company filings

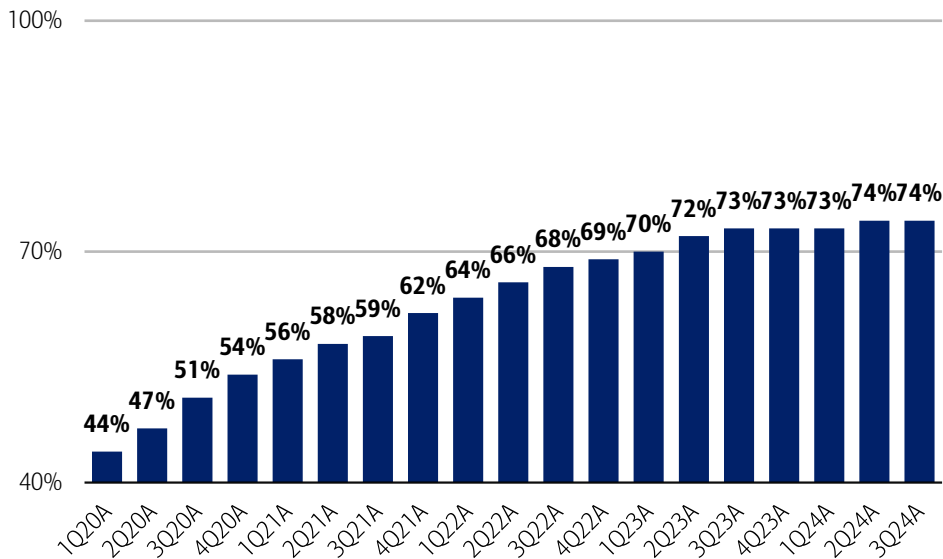
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Asana defined its 'Core' customers as those paying it more than \$5K annually. Revenue mix from the company's core customer base has steadily increased, reaching 74% in 3Q24.



**Exhibit 16: Asana has generated an increasing percentage of revenue from Core customers**

Asana Core customer (\$5K+ACV) revenue mix



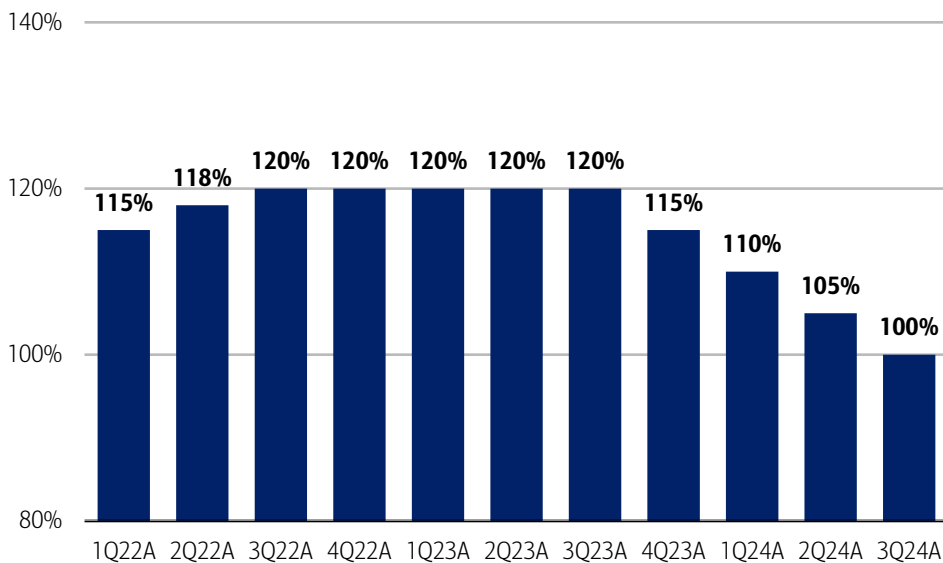
Source: company filings

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Asana's dollar-based net retention rate has come under pressure as macro pressures have mounted and its end-markets (particularly tech companies) have right-sized headcount. There are still some large tech company RIFs that it needs to anniversary, though management commentary suggests layoff-related NRR headwinds should begin easing in 4Q24/1Q25. However, we flag the recent increase in tech company layoff announcements in 1Q24 as a risk to Asana topline estimates.

**Exhibit 17: Asana's NRR has declined in recent quarters due primarily to macro pressures**

Asanas dollar-based net revenue retention

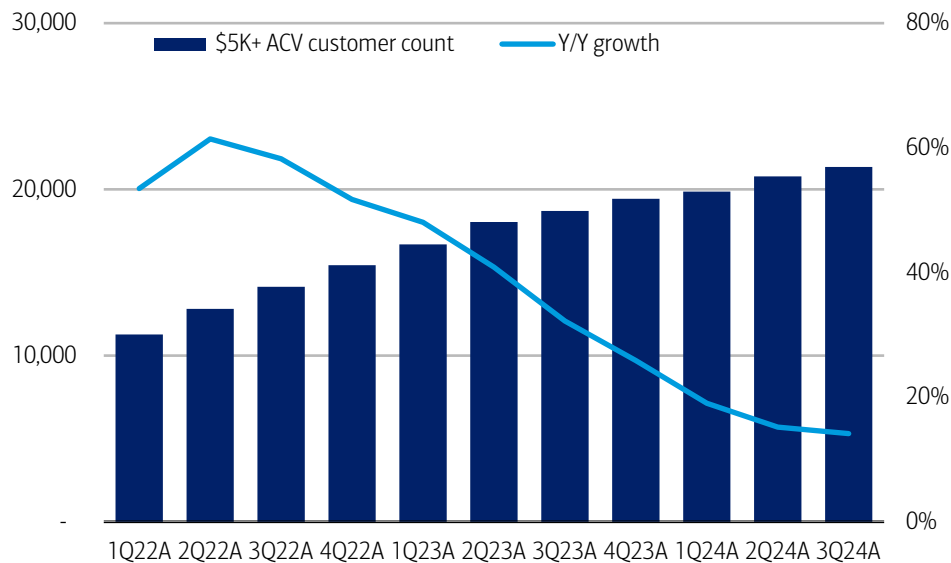


Source: company filings

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**Exhibit 18: Growth in Asana's Core customer count has slowed, but remains in the mid-teens**

Asana \$5K+ ACV customer count and growth



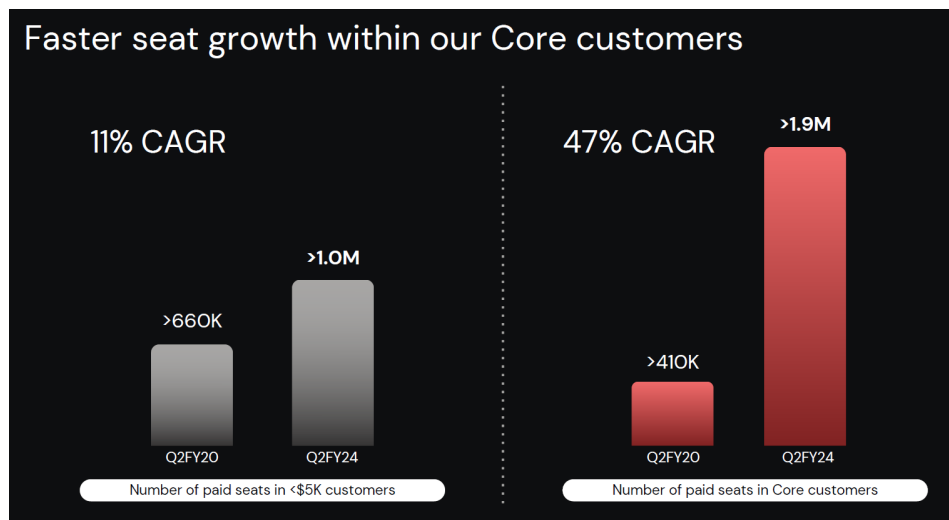
Source: company filings

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Asana had more than 1mn paid seats within its non-core customer base (less than \$5K ACV) as of 2Q24 – up from 660K as of 2Q20 (11% CAGR). However, it had more than 1.9mn paid seats within its Core customer base as of 2Q24 – up from 410K as of 2Q20 (47% CAGR). Within Asana's \$100K+ ACV customer cohort, it has a total of 725K+ total paid seats.

**Exhibit 19: Asana has scaled paid seat count much more rapidly within its Core customer base**

Asana paid seat count by cohort graphic



Source: company filings

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Asana has had success in expanding ARPU within its core customer base, growing Core customer ARPU to \$247 as of 2Q24, up from \$151 in 2Q20 (13% CAGR).

### Go-to-market motion: increasing focus on direct sales

Most of Asana's paying customers initially adopt its platform through product-led channels, like signing up on the website or via free trials. To demonstrate the value of its platform to potential paying customers, the company provides free trials of its paid Asana Business offering. Once adopted, customers typically expand through product-led channels or with the assistance of the company's direct sales team. Asana's hybrid product-led and direct sales model allows it to reach teams everywhere and then rapidly expand platform use within organizations.

#### Exhibit 20: PLG software customer acquisition flow chart

Illustrating the process from try to buy



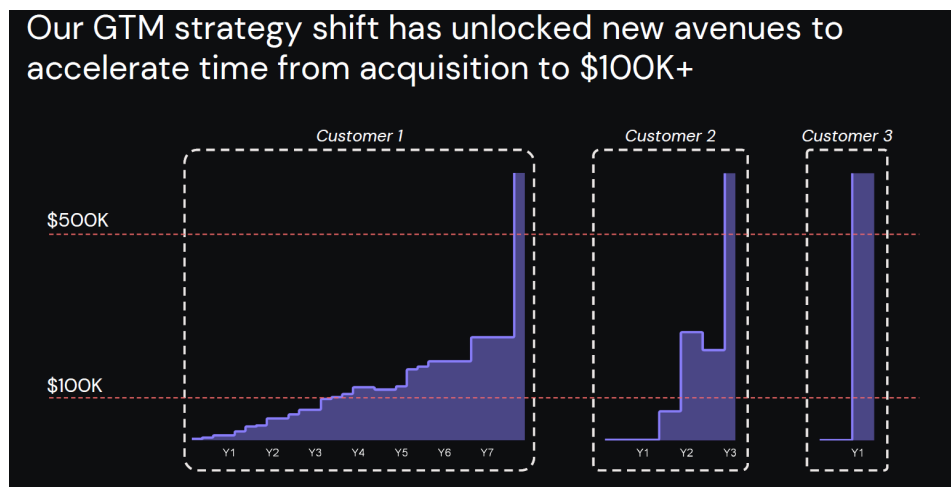
Source: BofA Global Research

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Asana is in the process of evolving its go-to-market model, with an increased focus on direct sales to complement its product-led motion. Interestingly, in December 2023 Asana management said, "Everything we're focused on today is in service of enterprise growth, building pipeline, retention and C-level customer engagement." The company is focusing on building pipeline for new enterprise ARR with targeted events and executive meetings, driving expansion via customer success programs and the introduction of AI features into product tiers.

#### Exhibit 21: Asana is undergoing a go-to-market shift with an increasing focus on enterprises

Asana presentation slide summarizing the benefits of its new GTM strategy



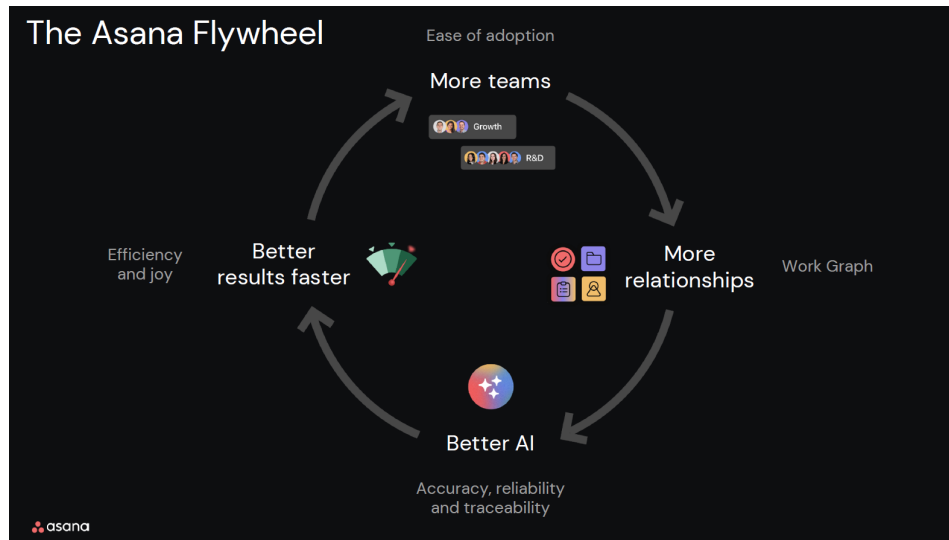
Source: company presentation

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Asana leverages a targeted direct sales team focused on promoting new use cases and expanding its footprint within its existing customer base. The company's direct sales force has a global presence and consists of teams concentrating primarily on accounts with expansion opportunities (such as department-specific and organization-wide use cases like strategic planning, employee onboarding, and goal setting).

**Exhibit 22: Asana benefits from the flywheel effect as viral growth drives expansion opportunities**

Asana go-to-market flywheel graphic



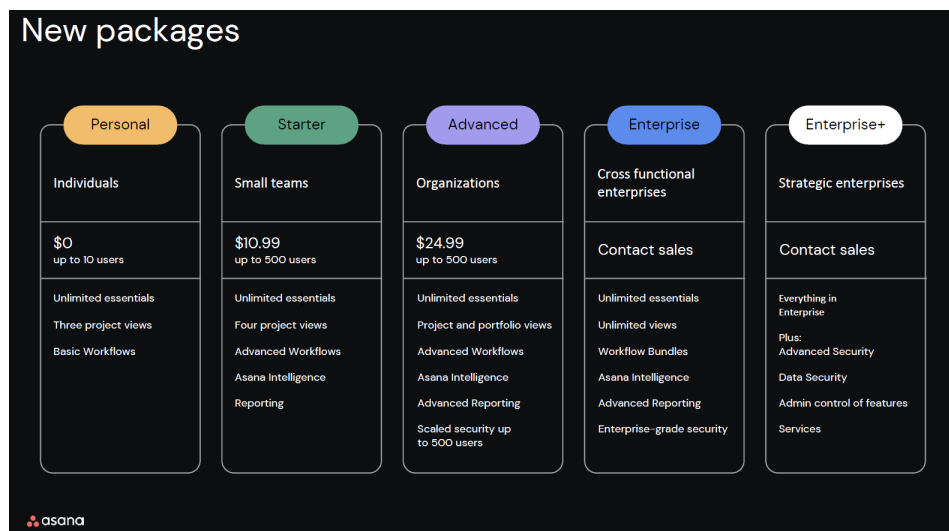
Source: company presentation

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Asana recently introduced new pricing and packaging, which should contribute to greater expansion and up-tiering (existing customers can remain on prior plans until renewal).

**Exhibit 23: Asana recently introduced pricing and packaging changes**

Summary of Asana pricing and packaging



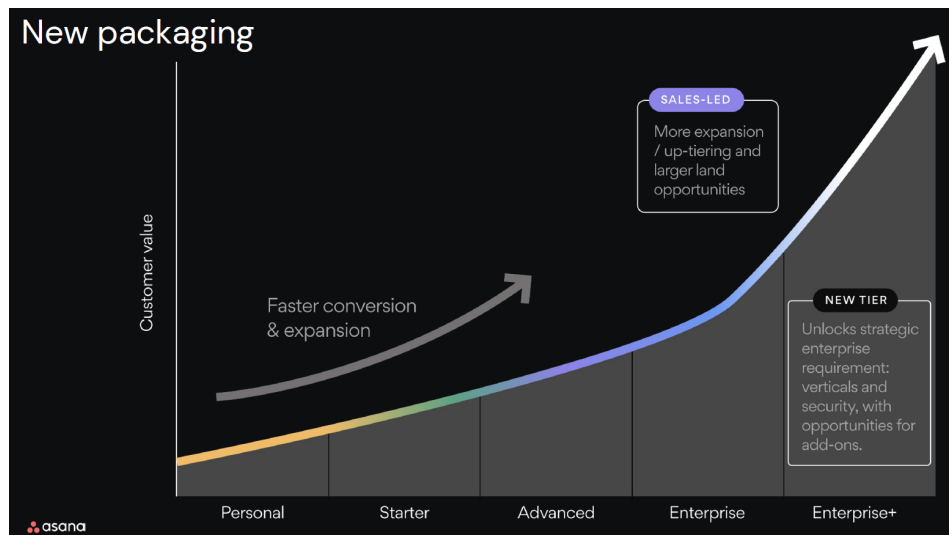
Source: company filings

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The company's new pricing and packaging strategy is designed to accelerate the customer journey with Asana. Tiers like Enterprise+ are designed to target customers that have additional regulatory, security, and scalability requirements, and should position the company to go deeper within specific verticals (such as healthcare, life sciences, financial services, government). Asana's new pricing and packaging plans are set to roll out in 4Q24. Asana Intelligence – which encapsulates all of the company's investments in AI – is included in all of its paid tiers. However, AI enhancements and features are tailored to what's available in each package (the AI gets better as customers up-tier).

**Exhibit 24: Asana's recently announcing packaging changes are designed to drive up-tiering**

Summary of expected impact of Asana new pricing and packaging



Source: company presentation

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Other key go-to-market initiatives include 1) increased focus on verticalization to win a higher percentage of the Global 2,000, 2) extending channel partnerships in geographic areas like Latin America, and 3) adding direct sales capacity to help with new logo growth.

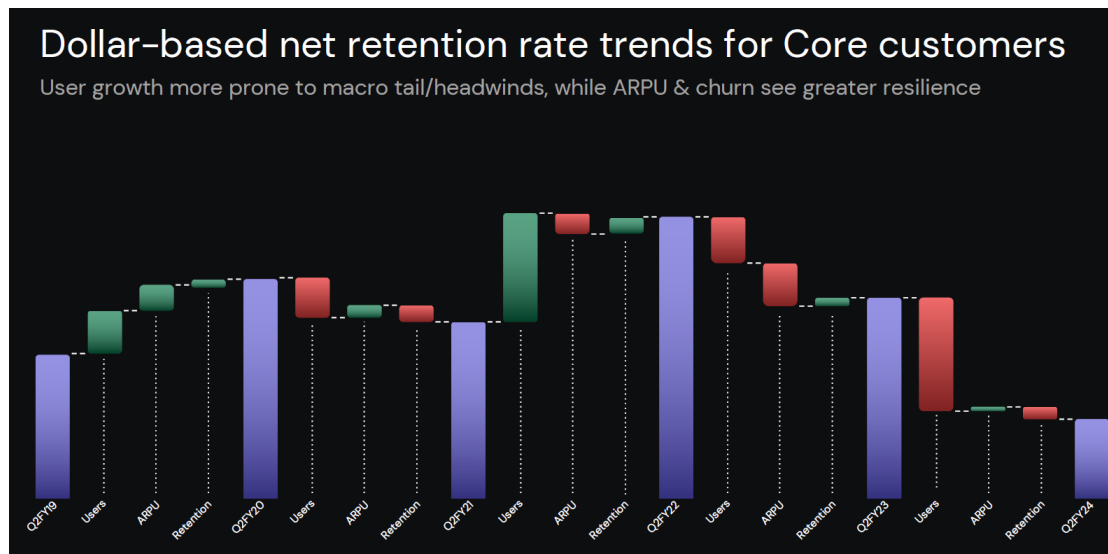
**Numerous growth levers like seat expansion and up-tiering**

We expect the primary driver of Asana's growth reacceleration to be seat expansion given the low penetration of its Core customer base. The company's second most important lever is likely up-tiering of existing paid users incentivized by feature gating and Asana Intelligence.

NRR has primarily been pressured by seat reductions from companies that had layoffs in CY23 and are adjusting their license needs at renewal. Asana management believes dollar-based net retention rates should bottom in Q1 at plus or minus 100%, when a number of large deals from the previous year renew. Management commentary suggests that most of the pressure on both renewals and expansion is coming from the tech vertical. User growth tends to be more prone to macro tail/headwinds, while ARPU and churn see greater resilience. Going forward, Asana expects improvement in NRR to be driven primarily by user growth, followed by ARPU expansion, followed by increased retention.

**Exhibit 25: Seat rationalization during tougher macros can put pressure on vendor NRRs**

Asana slide summarizing variables impact dollar-based net retention rate for core customers



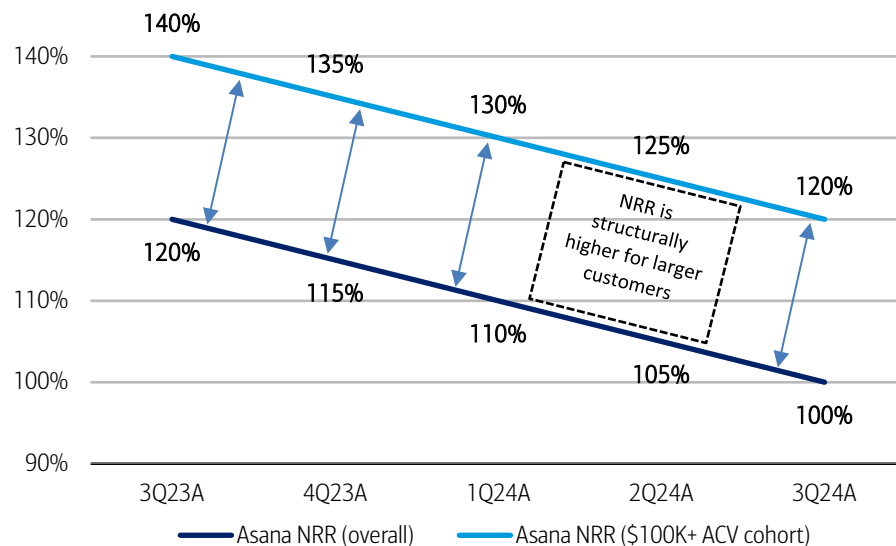
Source: Asana presentation

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Management commentary suggests Asana is beginning to see a stabilization in new business, though macro headwinds are still pressuring the renewal base. Deal cycles continue to be longer and budgets remain a significant factor. While the company is still working through headwinds from larger customers, it is seeing stable logo churn rates and low logo churn in the company's largest accounts.

**Exhibit 26: Asana has consistently driven expansion most rapidly within its larger customer cohort**

Asana's overall net revenue retention (NRR) versus NRR for customers with \$100K+ in ACV



Source: company filings

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### AI strategy: a holistic approach, mapping relationships across organizations

We argue that Asana's data model is uniquely well-suited for AI, as its Work Graph helps customers get their data 'in order' for AI use cases.

In the context of CWM software, AI can significantly improve employee productivity and provide greater clarity on what work matters, how to align resources, and where to invest as a business. As an example of user productivity enhancements, customers can leverage Asana's AI-enabled products to generate project status reports in minutes, which previously might have taken hours. Other potential efficiency-driving applications of AI include intelligent work orchestration (for example, predicting the time required for certain tasks to enable more seamless planning/management).

Asana frames its AI-enabled features as both copilots for individuals and 'air traffic control' for entire organizations. Asana's AI applies a more holistic approach, mapping relationships across broader organizations between individuals and the work they're trying to achieve with the goal of providing more reliable, accurate and trusted generative outputs. Tens of thousands of users are already experimenting with the AI-enabled features that Asana rolled out in October and November 2023, including:

- **Smart Summaries** to identify action items and highlights from conversations, tasks, and comments.
- **Smart Editor** for writing clearer and more compelling responses that strike the right tone.
- **Smart Fields** to organize projects with auto-generated custom fields.
- **Smart Answers** which helps provide timely answers and insights about projects, identify blockers, and determine next steps.
- **Smart Status** to identify blind spots, open questions, and roadblocks with automatic status updates.

### Monetization of AI-enabled functionality

While undeniably valuable functionality, we expect features like automated report generation to become table stakes for CWM vendors, likely making direct monetization challenging. However, we see greater potential for AI differentiation in more complex use cases like automated task delegation based on skill-set, logical sub-task generation (breaking steps and dependencies to hit deadlines efficiently), and goal-based resource management.

The company includes Asana Intelligence (AI functionality) in each of its paid plans (with more advanced functionality included in higher priced tiers). Its plan for AI monetization is indirect, as it seeks to leverage its newly introduced AI-enabled functionality as a tool to drive customer up-tiering and seat expansion. Interestingly, management commentary suggests that, in some cases, the introduction of AI-enabled features has brought forward customer renewal conversations.

### Could Asana's data model deepen its competitive moat?

Asana's work graph architecture structures work data so that there is a single source of truth, data is highly scalable, and the relationships between datapoints is legible to AI. The cross-functional nature of the Work Graph data model is important in the context of AI use cases because information silos can isolate contexts that could otherwise be used. Asana's Work Graph also helps to solve the 'black box' and hallucination problems commonly associated with AI, as users can view underlying assumptions and context driving recommendations. We note that Asana leverages 3rd-party large language models such as those provided by OpenAI.

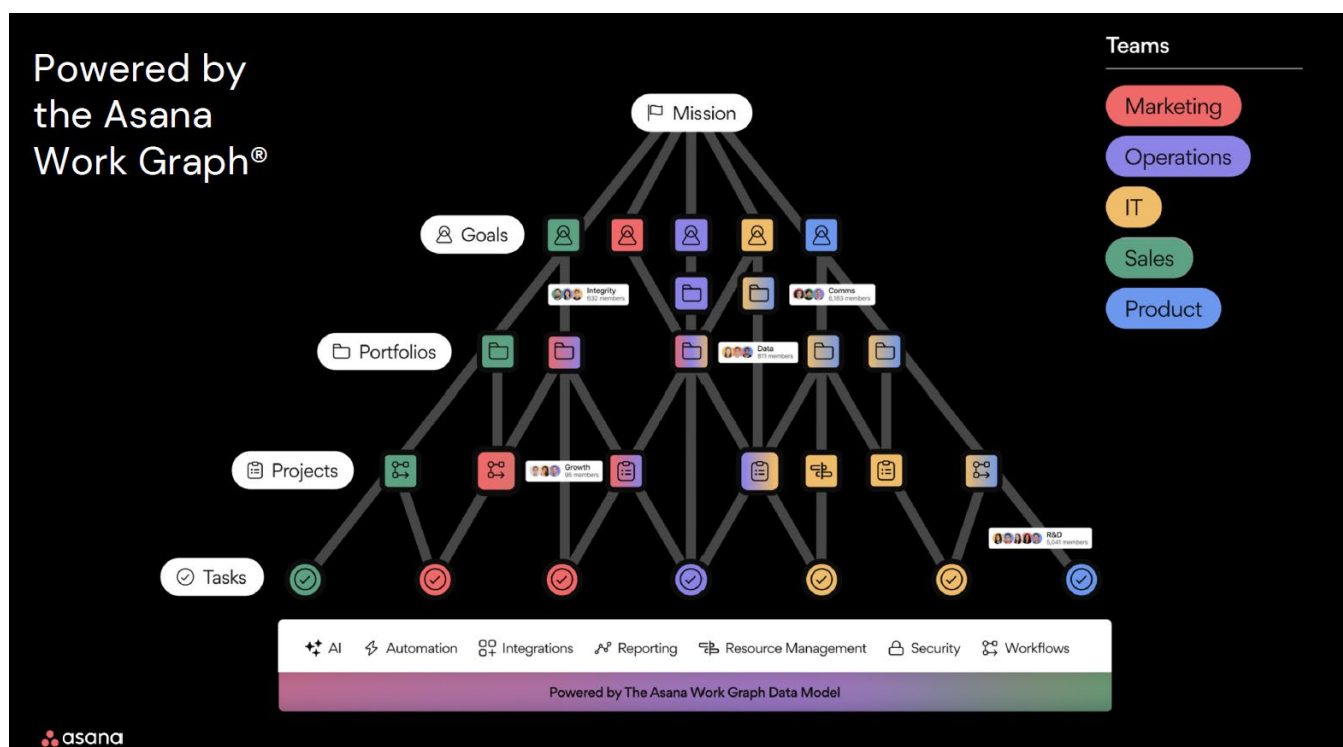
## The Asana Platform: scalable, customizable, easy to use

Individuals can manage and prioritize across each of their projects to maximize their effectiveness, reduce distractions, and collaborate with teammates. Team leads can manage work across a portfolio of projects or processes, see progress/bottlenecks, resource constraints, and milestones seamlessly (without spreadsheets, email, or status meetings). In addition, executives can communicate company-wide goals, monitor status, and oversee work across projects to gain real-time insights into which initiatives are on track or at risk.

Asana serves as the system of record for past, current, and future work. It is powered by a proprietary, multi-dimensional data model called the Asana Work Graph, which captures and associates 1) units of work (tasks, projects, milestones, goals, and portfolios), 2) the people responsible for executing those units of work, 3) the processes in which work gets done (rules, templates, and workflows), 4) information about that work (files, comments, status, and metadata), and 5) the relationships across and within this data.

### Exhibit 27: Asana is powered by its unique graph-based data model, the Asana Work Graph

Summary of how Asana provides value across teams



Source: company filings

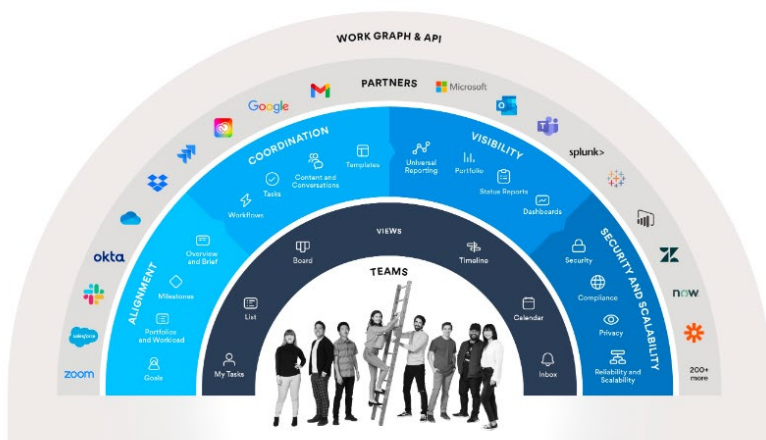
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The Asana Work Graph provides individuals, team leads, and executives with dynamic, up-to-date views into the work that is most relevant to them, across multiple people and projects. The company provides interactive dynamic views (List, Calendar, Board, Timeline, Goals, Portfolio, Reports) so that teams can work together on the same underlying data in whatever way makes most sense to them.



**Exhibit 28: Asana provides a comprehensive platform for work management**

Asana platform summary



Source: company filings

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The Asana platform maintains a robust API that enables developers to build apps on it and integrate efficiently with applications like Microsoft Teams, Slack, Salesforce, Gmail, Adobe and many more. Apps built on Asana may use App Components, which enable developers to display customized widgets, forms, and rules within its user interface that empower teams to work more efficiently.

The architecture powering Asana is secure and scalable, offering users a customized experience that is easy to navigate while handling complex data management behind the scenes. The company's cloud-native platform includes proprietary software services built on top of infrastructure provided by Amazon Web Services. It shards customer data in its distributed datastore to scale horizontally and provide high performance and redundancy.

**Exhibit 29: We expect FY25 revenues of \$736mn, 3% above consensus**

Asana income statement

	FY22A	FY23A	1Q24A	2Q24A	3Q24A	4Q24E	FY24E	1Q25E	2Q25E	3Q25E	4Q25E	FY25E	FY26E	FY27E
(\$, thousands)	Jan-22	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24	Jan-24	Apr-24	Jul-24	Oct-24	Jan-25	Jan-25	Jan-26	Jan-27
Revenue	378,437	547,212	152,411	162,455	166,503	168,168	649,537	169,850	179,191	188,151	198,499	735,691	898,335	1,104,237
% Y/Y	67%	44.6%	26.3%	20%	18%	12%	18.7%	11%	10%	13%	18%	13.3%	22.1%	22.9%
% Q/Q			1%	7%	2%	1%		1%	5%	5%	5%			
Cost of revenue	38,054	54,358	14,512	15,776	15,635	17,489	63,412	16,985	17,919	18,815	19,850	73,569	98,817	121,466
% Revs	10.1%	9.9%	9.5%	9.7%	9.4%	10.4%	9.8%	10.0%	10.0%	10.0%	10.0%	10.0%	11.0%	11.0%
Gross profit	340,383	492,854	137,899	146,679	150,868	150,679	586,125	152,865	161,272	169,336	178,649	662,122	799,518	982,771
Gross margin	89.9%	90.1%	90.5%	90.3%	90.6%	89.6%	90.2%	90.0%	90.0%	90.0%	90.0%	90.0%	89.0%	89.0%
R&D	143,918	195,282	51,766	52,293	51,240	53,814	209,113	59,447	60,925	62,090	62,527	244,990	248,937	272,841
% Revs	38.0%	35.7%	34.0%	32.2%	30.8%	32.0%	32.2%	35.0%	34.0%	33.0%	31.5%	33.3%	27.7%	24.7%
S&M	252,202	369,731	81,526	79,639	82,604	85,766	329,535	84,925	86,012	88,431	89,325	348,692	424,515	477,655
% Revs	66.6%	67.6%	53.5%	49.0%	49.6%	51.0%	50.7%	50.0%	48.0%	47.0%	45.0%	47.4%	47.3%	43.3%
G&A	101,318	135,121	26,881	25,112	26,873	31,952	110,818	30,573	29,567	28,223	29,775	118,137	123,140	140,248
% Revs	26.8%	24.7%	17.6%	15.5%	16.1%	19.0%	17.1%	18.0%	16.5%	15.0%	15.0%	16.1%	13.7%	12.7%
Total opex (non-GAAP)	497,438	700,134	160,173	157,044	160,717	171,531	649,465	174,945	176,504	178,743	181,627	711,819	796,593	890,744
Non-GAAP operating income	(157,055)	(207,280)	(22,274)	(10,365)	(9,849)	(20,853)	(63,341)	(22,080)	(15,231)	(9,408)	(2,977)	(49,697)	2,925	92,027
% Op. Margin	-41.5%	-37.9%	-14.6%	-6.4%	-5.9%	-12.4%	-9.8%	-13.0%	-8.5%	-5.0%	-1.5%	-6.8%	0.3%	8.3%
Interest expense & other, net	(2,623)	4,933	4,699	3,197	2,467	3,944	14,307	3,944	3,944	3,944	3,944	15,777	15,777	15,777
Income (loss) before taxes	(159,678)	(202,347)	(17,575)	(7,168)	(7,382)	(16,909)	(49,034)	(18,136)	(11,287)	(5,463)	967	(33,920)	18,702	107,804
Income taxes	3,237	4,875	922	1,228	796	1,026	3,972	1,053	993	914	894	3,853	3,320	2,641
Tax rate	2.0%	2.4%	5.2%	17.1%	10.8%	6.1%	8.1%	5.8%	8.8%	16.7%	-92.4%	11.4%	-17.8%	-2.4%
Non-GAAP net income (loss)	(162,915)	(207,222)	(18,497)	(8,396)	(8,178)	(17,934)	(53,005)	(19,189)	(12,280)	(6,377)	73	(37,773)	15,382	105,163
Non-GAAP earnings per share (diluted)	(\$0.92)	(\$1.04)	(\$0.09)	(\$0.04)	(\$0.04)	(\$0.08)	(\$0.24)	(\$0.09)	(\$0.05)	(\$0.03)	\$0.00	(\$0.16)	\$0.06	\$0.42
Basic shares	176,401	200,034	216,413	219,004	221,776	222,776	219,992	225,349	227,979	230,652	233,385	229,341	239,692	250,436
Diluted shares	176,401	200,034	216,413	219,004	221,776	222,776	219,992	225,349	227,979	230,652	233,385	229,341	239,692	250,436

Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH



**Exhibit 30: Asana ended 3Q24 with \$530mn in cash and equivalents**

Asana balance sheet

(\$, thousands)	FY22A	FY23A	1Q24A	2Q24A	3Q24A	4Q24E	FY24E	1Q25E	2Q25E	3Q25E	4Q25E	FY25E	FY26E	FY27E
	Jan-22	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24	Jan-24	Apr-24	Jul-24	Oct-24	Jan-25	Jan-25	Jan-26	Jan-27
Cash and cash equivalents	240,403	526,563	382,234	413,697	268,314	248,756	248,756	253,589	278,065	284,272	293,579	293,579	389,242	575,306
Marketable securities	71,628	2,739	141,315	123,809	261,726	261,726	261,726	261,726	261,726	261,726	261,726	261,726	261,726	261,726
Accounts receivable, net	59,085	82,363	98,906	66,330	68,032	89,911	89,911	104,946	76,325	82,276	111,462	111,462	129,835	156,069
Prepaid expenses and other	40,278	48,726	48,088	47,230	46,069	60,729	60,729	64,543	68,093	57,507	63,520	63,520	80,865	101,732
Total current assets	411,394	660,391	670,543	651,066	644,141	661,122	661,122	684,804	684,209	685,781	730,286	730,286	861,668	1,094,833
PP&E	99,632	94,984	96,876	97,938	98,241	98,595	98,595	99,070	99,872	100,335	100,922	100,922	103,726	107,151
Restricted cash, noncurrent	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating lease ROU assets	174,083	176,189	194,365	185,112	182,779	182,779	182,779	182,779	182,779	182,779	182,779	182,779	182,779	182,779
Investments, noncurrent	2,760	-	-	-	-	-	-	-	-	-	-	-	-	-
Other assets	19,166	23,399	22,503	22,291	22,519	25,601	25,601	33,970	32,254	27,410	31,706	31,706	37,617	46,836
<b>Total assets</b>	<b>707,035</b>	<b>954,963</b>	<b>984,287</b>	<b>956,407</b>	<b>947,680</b>	<b>968,098</b>	<b>968,098</b>	<b>1,000,623</b>	<b>999,115</b>	<b>996,305</b>	<b>1,045,694</b>	<b>1,045,694</b>	<b>1,185,789</b>	<b>1,431,599</b>
Liabilities and SE														
Accounts payable	11,557	7,554	8,871	5,188	9,988	9,632	9,632	9,612	7,984	9,131	10,931	10,931	14,616	18,192
Accrued expenses and other	60,915	83,488	69,564	67,472	65,698	76,621	76,621	73,516	79,168	71,338	90,813	90,813	100,395	113,085
Deferred revenue, current	170,143	226,443	257,734	254,905	249,673	265,623	265,623	300,495	297,374	291,462	310,289	310,289	364,933	431,872
Operating lease liabilities	12,573	14,831	17,164	16,246	17,592	17,592	17,592	17,592	17,592	17,592	17,592	17,592	17,592	17,592
Total current liabilities	255,188	332,316	353,333	343,811	342,951	369,468	369,468	401,215	402,119	389,523	429,626	429,626	497,536	580,741
Term loan, net	34,612	46,696	46,082	45,469	44,856	44,023	44,023	43,189	42,425	41,627	40,828	40,828	37,634	34,439
Convertible notes, net	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Deferred revenue, noncurrent	4,082	7,156	6,215	6,230	5,770	6,786	6,786	6,545	6,804	7,127	7,679	7,679	9,254	11,500
Operating lease liabilities	208,422	210,012	226,604	223,275	220,181	220,181	220,181	220,181	220,181	220,181	220,181	220,181	220,181	220,181
Other liabilities	891	2,209	3,968	3,369	1,753	2,860	2,860	4,444	4,335	3,229	2,154	2,154	2,901	3,361
<b>Total liabilities</b>	<b>503,195</b>	<b>598,389</b>	<b>636,202</b>	<b>622,154</b>	<b>615,511</b>	<b>643,318</b>	<b>643,318</b>	<b>675,574</b>	<b>675,864</b>	<b>661,686</b>	<b>700,468</b>	<b>700,468</b>	<b>767,506</b>	<b>850,223</b>
Stockholders' equity														
Redeemable convertible pref	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common stock	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Additional paid-in capital	1,034,252	1,595,001	1,647,422	1,706,006	1,767,633	1,821,373	1,821,373	1,889,710	1,951,611	2,023,144	2,090,465	2,090,465	2,377,521	2,710,772
Accumulated OCI	(626)	(873)	(315)	(1,317)	(3,278)	(3,278)	(3,278)	(3,278)	(3,278)	(3,278)	(3,278)	(3,278)	(3,278)	(3,278)
Accumulated deficit	(829,788)	(1,237,556)	(1,299,024)	(1,370,438)	(1,432,188)	(1,493,317)	(1,493,317)	(1,561,385)	(1,625,084)	(1,685,250)	(1,741,963)	(1,741,963)	(1,955,961)	(2,126,120)
<b>Total SE</b>	<b>203,840</b>	<b>356,574</b>	<b>348,085</b>	<b>334,253</b>	<b>332,169</b>	<b>324,780</b>	<b>324,780</b>	<b>325,049</b>	<b>323,250</b>	<b>334,619</b>	<b>345,226</b>	<b>345,226</b>	<b>418,284</b>	<b>581,375</b>
<b>Total liabilities and SE</b>	<b>707,035</b>	<b>954,963</b>	<b>984,287</b>	<b>956,407</b>	<b>947,680</b>	<b>968,098</b>	<b>968,098</b>	<b>1,000,623</b>	<b>999,115</b>	<b>996,305</b>	<b>1,045,694</b>	<b>1,045,694</b>	<b>1,185,789</b>	<b>1,431,599</b>

Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH

**Exhibit 31: We expect Asana to reach FCF breakeven by CY24-end**

Asana cash flow statement

	FY22A	FY23A	1Q24A	2Q24A	3Q24A	4Q24E	FY24E	1Q25E	2Q25E	3Q25E	4Q25E	FY25E	FY26E	FY27E
(\$, thousands)	Jan-22	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24	Jan-24	Apr-24	Jul-24	Oct-24	Jan-25	Jan-25	Jan-26	Jan-27
<b>Net loss</b>	<b>(288,342)</b>	<b>(407,768)</b>	<b>(61,468)</b>	<b>(71,414)</b>	<b>(61,750)</b>	<b>(61,129)</b>	<b>(255,761)</b>	<b>(68,068)</b>	<b>(63,699)</b>	<b>(60,165)</b>	<b>(56,713)</b>	<b>(248,646)</b>	<b>(213,998)</b>	<b>(170,159)</b>
Allowance for expected credit loss	2,257	1,918	737	652	683	736	2,808	702	693	704	709	2,808	2,812	2,814
D&A	8,464	12,669	3,288	3,588	3,531	3,639	14,046	3,700	3,913	4,097	4,319	16,029	19,568	24,052
Gain on sales of PP&E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amortization of deferred contract acquisition costs	8,647	15,098	4,871	5,432	5,668	5,140	21,111	5,278	5,379	5,366	5,291	21,314	21,325	21,321
Stock-based compensation	104,527	188,962	41,498	56,205	52,866	42,042	192,611	47,558	50,174	52,682	55,580	205,994	224,584	270,538
Net amortization (accretion) on securities	784	62	(444)	(488)	(636)	-	(1,568)	-	-	-	-	-	-	-
Change in fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-cash lease expense	16,589	15,595	5,263	4,781	3,954	4,542	18,540	4,635	4,478	4,402	4,514	18,029	17,950	17,942
Amortization of discount on revolver/term loan	10,645	41	30	30	31	30	121	30	30	30	30	121	121	121
Non-cash interest expense	6,670	-	-	-	-	-	-	-	-	-	-	-	-	-
Impairment	-	-	-	5,009	-	-	5,009	-	-	-	-	-	-	-
Changes in NWC:														
Accounts receivable	(26,993)	(25,179)	(17,252)	31,910	(2,407)	(21,879)	(9,628)	(15,035)	28,621	(5,951)	(29,186)	(21,550)	(18,373)	(26,234)
Prepaid expenses and other assets	(23,652)	(24,042)	(4,625)	(4,432)	(4,707)	(14,660)	(28,424)	(3,814)	(3,550)	10,585	(6,012)	(2,791)	(17,345)	(20,867)
Other assets	(10,724)	(4,108)	881	467	(606)	(3,082)	(2,340)	(8,369)	1,715	4,844	(4,296)	(6,105)	(5,910)	(9,219)
Accounts payable	7,259	(4,391)	(14)	(3,231)	6,857	(356)	3,256	(20)	(1,628)	1,147	1,800	1,300	3,685	3,576
Accrued expenses and other liabilities	23,682	25,539	(13,417)	(800)	(2,668)	10,923	(5,962)	(3,105)	5,652	(7,830)	19,476	14,193	9,582	12,690
Deferred revenue	68,339	59,375	30,350	(2,814)	(5,693)	16,966	38,809	34,630	(2,861)	(5,590)	19,379	45,558	56,219	69,186
Operating lease liabilities	8,063	(13,829)	(4,291)	(4,663)	(3,356)	-	(12,310)	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	1,107	1,107	1,584	(109)	(1,106)	(1,075)	(706)	747	460
<b>Net cash from operating activities</b>	<b>(83,785)</b>	<b>(160,058)</b>	<b>(14,593)</b>	<b>20,232</b>	<b>(8,233)</b>	<b>(15,982)</b>	<b>(18,576)</b>	<b>(293)</b>	<b>28,810</b>	<b>3,215</b>	<b>13,815</b>	<b>45,547</b>	<b>100,966</b>	<b>196,220</b>
Cash from investing:														
Purchases of marketable securities	(62,394)	(72,216)	(139,294)	-	(145,018)	-	(284,312)	-	-	-	-	-	-	-
Sales of marketable securities	373	-	-	-	12	-	12	-	-	-	-	-	-	-
Maturities of marketable securities	132,301	143,865	1,615	16,526	7,500	-	25,641	-	-	-	-	-	-	-
Purchases of PP&E	(41,587)	(5,351)	(1,866)	(4,100)	(1,255)	(2,851)	(10,072)	(2,975)	(3,375)	(3,242)	(3,500)	(13,092)	(15,955)	(19,595)
Sales of PP&E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capitalized internal-use software costs	(1,132)	(1,806)	(821)	(1,527)	(1,977)	(1,141)	(5,466)	(1,200)	(1,341)	(1,317)	(1,406)	(5,264)	(6,417)	(7,882)
<b>Net cash used in investing activities</b>	<b>27,561</b>	<b>64,492</b>	<b>(140,366)</b>	<b>10,899</b>	<b>(140,738)</b>	<b>(3,993)</b>	<b>(274,198)</b>	<b>(4,175)</b>	<b>(4,715)</b>	<b>(4,560)</b>	<b>(4,906)</b>	<b>(18,356)</b>	<b>(22,372)</b>	<b>(27,477)</b>
Cash from financing														
Proceeds from convertible preferred stock	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from term loan	9,000	49,555	-	-	-	-	-	-	-	-	-	-	-	-
Repayment of term loan	(1,667)	(38,333)	(625)	(1,250)	(625)	(833)	(3,333)	(833)	(764)	(799)	(799)	(3,194)	(3,194)	(3,194)
Proceeds from private placement	-	347,289	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from convertible notes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taxes paid related to settlement of equity awards	-	-	-	(7)	-	-	(7)	-	-	-	-	-	-	-
Repurchases of common stock	(40)	(9)	-	-	-	-	-	-	-	-	-	-	-	-
Proceeds from exercise of stock options	16,567	5,773	1,798	1,275	783	1,251	5,107	1,277	1,146	1,114	1,197	4,734	4,683	4,679
Proceeds from employee stock purchase plan	13,350	17,116	8,558	-	6,511	-	15,069	8,857	-	7,235	-	16,092	15,581	15,836
<b>Net cash from financing activities</b>	<b>37,210</b>	<b>381,391</b>	<b>9,731</b>	<b>18</b>	<b>6,669</b>	<b>417</b>	<b>16,835</b>	<b>9,300</b>	<b>382</b>	<b>7,550</b>	<b>398</b>	<b>17,631</b>	<b>17,069</b>	<b>17,321</b>
Effect of FX	(461)	335	899	314	(3,081)	-	(1,868)	-	-	-	-	-	-	-
<b>Net change in cash</b>	<b>(19,475)</b>	<b>286,160</b>	<b>(144,329)</b>	<b>31,463</b>	<b>(145,383)</b>	<b>(19,558)</b>	<b>(277,807)</b>	<b>4,833</b>	<b>24,477</b>	<b>6,206</b>	<b>9,307</b>	<b>44,822</b>	<b>95,663</b>	<b>186,064</b>
Cash - beginning of period	259,878	240,403	526,563	382,234	413,697	268,314	526,563	248,756	253,589	278,065	284,272	248,756	293,579	389,242
Cash - end of period	240,403	526,563	382,234	413,697	268,314	248,756	248,756	253,589	278,065	284,272	293,579	293,579	389,242	575,306

Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH



# Appendix

## Exhibit 32: Asana trades well below high growth peer averages for EV/CY2025 Sales

Comp table for high growth software

Ticker	Company name	Mkt Cap (\$mn)	2023 Rev Growth	2024 Rev Growth	2025 Rev Growth	EV/2023 Sales	EV/2024 Sales	EV/2025 Sales	2023 EV/Rev/ Growth	2024 EV/Rev/ Growth	2025 EV/Rev/ Growth	2023 PF Op Margin	2024 PF Op Margin	2025 PF Op Margin	EV/2023 FCF	EV/2024 FCF	EV/2025 FCF
<b>High growth</b>																	
APPF	APPFOLIO INC - A	8,426	31%	23%	20%	13.3x	10.8x	9.0x	0.4x	0.5x	0.5x	12.2%	15.4%	18.5%	...	55.9x	41.2x
<b>ASAN</b>	<b>ASANA INC - CL A</b>	<b>3,970</b>	<b>20%</b>	<b>11%</b>	<b>13%</b>	<b>5.8x</b>	<b>5.2x</b>	<b>4.6x</b>	<b>0.3x</b>	<b>0.5x</b>	<b>0.4x</b>	<b>-10.8%</b>	<b>-7.7%</b>	<b>-2.1%</b>	<b>...</b>	<b>...</b>	<b>57.5x</b>
BILL	BILL HOLDINGS INC	6,534	39%	9%	21%	4.9x	4.5x	3.8x	0.1x	0.5x	0.2x	13.0%	13.9%	16.6%	26.9x	33.1x	22.5x
CFLT	CONFLUENT INC	11,028	33%	22%	25%	13.2x	10.8x	8.6x	0.4x	0.5x	0.3x	-7.4%	0.0%	5.5%	...	...	...
CRWD	CROWDSTRIKE	75,800	37%	29%	25%	24.6x	19.1x	15.2x	0.7x	0.7x	0.6x	20.3%	22.3%	23.6%	81.2x	61.4x	47.2x
DDOG	DATADOG INC	46,273	27%	20%	25%	21.0x	17.4x	13.9x	0.8x	0.9x	0.6x	23.0%	21.3%	22.3%	70.5x	60.9x	46.8x
FROG	JFROG LTD	4,826	25%	22%	22%	12.3x	10.1x	8.3x	0.5x	0.5x	0.4x	11.1%	13.3%	14.3%	59.6x	58.1x	44.9x
MAX	MEDIAALPHA INC	937	(15%)	25%	16%	2.8x	2.3x	1.9x	-0.2x	0.1x	0.1x	-10.3%	-1.5%	0.4%	54.3x	41.0x	30.5x
MDB	MONGODB INC	37,123	29%	22%	26%	22.0x	18.0x	14.3x	0.8x	0.8x	0.5x	14.4%	14.1%	16.8%	...	...	...
MNDY	MONDAY.COM LTD	9,114	41%	28%	27%	11.0x	8.6x	6.8x	0.3x	0.3x	0.3x	8.4%	6.8%	8.2%	39.3x	39.5x	30.0x
NOW	SERVICENOW INC	159,226	24%	22%	22%	17.5x	14.3x	11.8x	0.7x	0.7x	0.5x	27.7%	29.0%	30.2%	57.9x	46.3x	36.5x
PATH	UIPATH INC	13,280	22%	23%	23%	9.0x	7.3x	5.9x	0.4x	0.3x	0.3x	15.6%	16.2%	17.6%	44.9x	40.2x	29.3x
PCOR	PROCORE	11,108	...	20%	20%	11.1x	9.2x	7.7x	0.3x	0.5x	0.4x	2.0%	7.7%	10.2%	...	91.4x	58.6x
S	SENTINELONE INC	7,817	50%	33%	31%	11.7x	8.8x	6.7x	0.2x	0.3x	0.2x	-22.0%	-3.4%	6.6%	...	...	60.8x
SHOP	SHOPIFY INC	85,759	26%	24%	25%	11.6x	9.3x	7.4x	0.4x	0.4x	0.3x	11.1%	14.3%	17.3%	90.5x	75.1x	41.0x
SMAR	SMARTSHEET	5,682	26%	20%	20%	5.5x	4.6x	3.8x	0.2x	0.2x	0.2x	8.3%	10.3%	13.3%	39.8x	30.1x	19.6x
SNOW	SNOWFLAKE INC	81,908	35%	30%	31%	28.2x	21.6x	16.5x	0.8x	0.7x	0.5x	6.8%	10.6%	14.5%	...	75.0x	55.9x
SPT	SPROUT SOCIAL INC	3,627	31%	28%	27%	10.6x	8.3x	6.6x	0.3x	0.3x	0.2x	1.4%	3.6%	6.4%	...	...	70.0x
U	UNITY SOFTWARE	10,171	53%	14%	24%	5.4x	4.7x	3.8x	0.1x	0.3x	0.2x	18.0%	30.3%	34.5%	38.8x	18.3x	11.3x
ZS	ZSCALER INC	33,385	41%	26%	25%	17.6x	14.0x	11.2x	0.4x	0.5x	0.4x	17.0%	17.7%	19.4%	69.2x	63.4x	46.0x
<b>Average</b>			<b>30%</b>	<b>23%</b>	<b>23%</b>	<b>13.0x</b>	<b>10.4x</b>	<b>8.4x</b>	<b>0.4x</b>	<b>0.5x</b>	<b>0.4x</b>	<b>8.0%</b>	<b>11.7%</b>	<b>14.7%</b>	<b>56.1x</b>	<b>52.6x</b>	<b>41.6x</b>
<b>Median</b>			<b>31%</b>	<b>23%</b>	<b>24%</b>	<b>11.6x</b>	<b>9.3x</b>	<b>7.6x</b>	<b>0.4x</b>	<b>0.5x</b>	<b>0.4x</b>	<b>11.1%</b>	<b>13.6%</b>	<b>15.6%</b>	<b>56.1x</b>	<b>55.9x</b>	<b>43.0x</b>

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

**Exhibit 33: Asana trades below horizontal software peer averages for EV/CY2025 Sales**

Comp table for horizontal software

Ticker	Company name	Mkt Cap (\$mn)	2023 Rev Growth	2024 Rev Growth	2025 Rev Growth	EV/2023 Sales	EV/2024 Sales	EV/2025 Sales	2023 EV/Rev/ Growth	2024 EV/Rev/ Growth	2025 EV/Rev/ Growth	2023 PF Op Margin	2024 PF Op Margin	2025 PF Op Margin	EV/2023 FCF	EV/2024 FCF	EV/2025 FCF
ADBE	ADOBE INC	246,745	10%	10%	12%	12.5x	11.4x	10.1x	1.22x	1.11x	0.9x	46%	45%	46%	35.0x	26.5x	24.0x
AI	C3.AI INC-A	3,160	10%	16%	14%	8.3x	7.1x	6.3x	0.81x	0.43x	0.4x	(41%)	(17%)	(0%)	...	...	49.5x
ALRM	ALARM.COM	3,829	4%	5%	8%	4.2x	4.0x	3.7x	0.94x	0.87x	0.4x	13%	13%	16%	33.1x	66.4x	25.4x
<b>ASAN</b>	<b>ASANA INC</b>	<b>3,970</b>	<b>20%</b>	<b>11%</b>	<b>13%</b>	<b>5.8x</b>	<b>5.2x</b>	<b>4.6x</b>	<b>0.28x</b>	<b>0.46x</b>	<b>0.4x</b>	<b>(11%)</b>	<b>(8%)</b>	<b>(2%)</b>	<b>...</b>	<b>...</b>	<b>57.5x</b>
APPN	APPIAN CORP-A	2,418	17%	13%	14%	4.7x	4.1x	3.6x	0.28x	0.32x	0.2x	(10%)	(5%)	0%	...	...	...
BIGC	BIGCOMMERCE	627	11%	7%	7%	2.3x	2.1x	2.0x	0.21x	0.30x	0.3x	(2%)	3%	5%	...	...	47.3x
BILL	BILL HOLDINGS INC	6,534	39%	9%	21%	4.9x	4.5x	3.8x	0.13x	0.52x	0.2x	13%	14%	17%	26.9x	33.1x	22.5x
BL	BLACKLINE INC	4,229	13%	9%	9%	7.1x	6.5x	6.0x	0.55x	0.72x	0.7x	17%	17%	18%	34.7x	30.5x	26.7x
BLKB	BLACKBAUD INC	3,599	4%	7%	7%	4.0x	3.7x	3.5x	0.89x	0.51x	0.5x	27%	29%	30%	32.4x	16.6x	14.8x
BOX	BOX INC - CLASS A	3,745	5%	5%	7%	3.7x	3.5x	3.3x	0.69x	0.76x	0.5x	25%	27%	29%	12.6x	12.6x	10.9x
CRWD	CROWDSTRIKE	75,800	37%	29%	25%	24.6x	19.1x	15.2x	0.66x	0.65x	0.6x	20%	22%	24%	81.2x	61.4x	47.2x
CRM	SALESFORCE INC	288,071	11%	12%	14%	8.3x	7.4x	6.6x	0.76x	0.62x	0.5x	31%	32%	34%	33.7x	26.7x	21.2x
DBX	DROPBOX INC	7,999	8%	1%	1%	3.5x	3.4x	3.4x	0.5x	2.5x	2.6x	33%	32%	34%	11.4x	9.4x	8.7x
DDOG	DATADOG INC	46,273	27%	20%	25%	21.0x	17.4x	13.9x	0.8x	0.9x	0.6x	23%	21%	22%	70.5x	60.9x	46.8x
DOCU	DOCUSIGN INC	10,432	9%	6%	7%	3.5x	3.3x	3.1x	0.4x	0.5x	0.4x	25%	23%	24%	13.4x	12.6x	11.5x
DT	DYNATRACE INC	14,831	24%	18%	19%	10.4x	8.7x	7.4x	0.4x	0.5x	0.4x	28%	26%	27%	41.6x	37.4x	29.5x
ESTC	ELASTIC NV	13,074	17%	15%	17%	10.1x	8.7x	7.5x	0.6x	0.6x	0.4x	11%	11%	14%	...	67.6x	51.2x
EVBG	EVERBRIDGE INC	1,243	4%	5%	6%	3.4x	3.2x	3.1x	0.9x	0.6x	0.5x	14%	17%	19%	56.4x	36.0x	25.4x
FIVN	FIVE9 INC	4,348	17%	16%	18%	4.8x	4.2x	3.5x	0.3x	0.3x	0.2x	14%	15%	16%	50.1x	45.0x	24.6x
FROG	JFROG LTD	4,826	25%	22%	22%	12.3x	10.1x	8.3x	0.5x	0.5x	0.4x	11%	13%	14%	59.6x	58.1x	44.9x
FRSH	FRESHWORKS	6,505	20%	19%	19%	9.0x	7.6x	6.4x	0.5x	0.4x	0.3x	7%	8%	11%	63.0x	45.8x	34.6x
HUBS	HUBSPOT INC	30,226	25%	18%	22%	13.7x	11.6x	9.5x	0.5x	0.7x	0.4x	15%	16%	18%	93.4x	69.7x	52.2x
INTU	INTUIT INC	186,849	10%	12%	11%	12.7x	11.3x	10.2x	1.2x	0.9x	0.9x	39%	39%	39%	36.1x	37.9x	30.5x
JAMF	JAMF HOLDING CORP	2,689	17%	13%	13%	5.1x	4.5x	4.0x	0.3x	0.3x	0.3x	8%	11%	14%	65.7x	43.1x	27.5x
LAW	CS DISCO INC	475	2%	8%	13%	2.4x	2.2x	1.9x	1.4x	0.3x	0.1x	(26%)	(5%)	2%	...	...	...
MDB	MONGODB INC	37,123	29%	22%	26%	22.0x	18.0x	14.3x	0.8x	0.8x	0.5x	14%	14%	17%	...	...	...
MNDY	MONDAY.COM LTD	9,114	41%	28%	27%	11.0x	8.6x	6.8x	0.3x	0.3x	0.3x	8%	7%	8%	39.3x	39.5x	30.0x
NOW	SERVICENOW INC	159,226	24%	22%	22%	17.5x	14.3x	11.8x	0.7x	0.7x	0.5x	28%	29%	30%	57.9x	46.3x	36.5x
OKTA	OKTA INC	13,529	22%	10%	12%	5.8x	5.3x	4.7x	0.3x	0.5x	0.4x	12%	17%	19%	30.6x	27.4x	23.5x
PAYC	PAYCOM	10,399	23%	11%	12%	6.0x	5.4x	4.8x	0.3x	0.5x	0.4x	34%	31%	32%	34.8x	35.0x	27.2x
PCTY	PAYLOCITY	9,793	29%	14%	14%	7.3x	6.4x	5.7x	0.3x	0.5x	0.4x	29%	29%	31%	35.8x	33.3x	27.7x
PD	PAGERDUTY INC	2,228	16%	10%	13%	4.9x	4.5x	3.9x	0.3x	0.4x	0.3x	13%	15%	17%	30.0x	22.5x	18.1x
QLYS	QUALYS INC	6,111	13%	10%	10%	10.3x	9.4x	8.5x	0.8x	1.0x	0.8x	42%	38%	38%	24.2x	26.0x	23.6x
SHOP	SHOPIFY INC	85,759	26%	24%	25%	11.6x	9.3x	7.4x	0.4x	0.4x	0.3x	11%	14%	17%	90.5x	75.1x	41.0x
SMAR	SMARTSHEET INC	5,682	26%	20%	20%	5.5x	4.6x	3.8x	0.2x	0.2x	0.2x	8%	10%	13%	39.8x	30.1x	19.6x
SNOW	SNOWFLAKE INC	81,908	35%	30%	31%	28.2x	21.6x	16.5x	0.8x	0.7x	0.5x	7%	11%	15%	...	75.0x	55.9x
TEAM	ATLASSIAN	53,124	22%	18%	23%	13.6x	11.5x	9.3x	0.6x	0.6x	0.4x	22%	20%	22%	49.4x	47.5x	36.2x
TWLO	TWILIO INC - A	10,581	9%	4%	9%	1.8x	1.7x	1.6x	0.2x	0.4x	0.2x	13%	13%	13%	20.4x	17.0x	14.2x
WDAY	WORKDAY	81,677	17%	17%	17%	10.8x	9.2x	7.9x	0.6x	0.5x	0.5x	24%	24%	25%	45.2x	37.6x	32.4x
ZI	ZOOMINFO	7,091	13%	2%	5%	6.4x	6.2x	5.9x	0.5x	2.5x	1.2x	40%	39%	39%	19.4x	19.9x	18.9x
ZM	ZOOM VIDEO	19,281	3%	3%	4%	2.9x	2.8x	2.7x	1.1x	0.9x	0.6x	39%	37%	37%	9.5x	8.4x	8.0x
ZS	ZSCALER INC	33,385	41%	26%	25%	17.6x	14.0x	11.2x	0.4x	0.5x	0.4x	17%	18%	19%	69.2x	63.4x	46.0x
ZUO	ZUORA INC	1,156	10%	9%	10%	2.5x	2.3x	2.1x	0.3x	0.3x	0.2x	4%	14%	18%	...	20.6x	NA
<b>Average</b>			<b>18%</b>	<b>14%</b>	<b>15%</b>	<b>9.0x</b>	<b>7.7x</b>	<b>6.5x</b>	<b>0.5x</b>	<b>0.6x</b>	<b>0.4x</b>	<b>16%</b>	<b>18%</b>	<b>20%</b>	<b>42.6x</b>	<b>38.4x</b>	<b>30.6x</b>
<b>Median</b>			<b>17%</b>	<b>12%</b>	<b>14%</b>	<b>7.1x</b>	<b>6.4x</b>	<b>5.9x</b>	<b>0.4x</b>	<b>0.5x</b>	<b>0.4x</b>	<b>14%</b>	<b>17%</b>	<b>18%</b>	<b>35.9x</b>	<b>36.0x</b>	<b>27.5x</b>

Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH



## Price objective basis & risk

### Asana (ASAN)

Our \$25 PO is derived from a 6.4x 2025E EV/Revenue target multiple (0.3x growth adjusted). Our growth-adjusted target multiple is in line with the high-growth software group. We believe this is warranted given Asana's multiple levers for long-term growth, partially offset by its lower margin profile.

Downside risks to our PO are: 1) higher than expected layoffs in the tech sector leading to continued pressure on NRR (net revenue retention), 2) slower than expected progress in the company's go-to-market reorientation, and 3) pricing pressure from intensifying competition in the enterprise market.

## Analyst Certification

I, Michael J. Funk, 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
<b>BUY</b>				
	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
	Asana	ASAN	ASAN US	Michael J. Funk
	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
<b>NEUTRAL</b>				
	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
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**iQmethod<sup>SM</sup> Measures Definitions****Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

**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

**Denominator**

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

**Quality of Earnings**

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

**Numerator**

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash &amp; Equivalents

EBIT

**Denominator**

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

**Valuation Toolkit**

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

**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**

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

iQmethod<sup>SM</sup> is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and valuations. 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.

iQdatabase<sup>®</sup> is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

iQprofile<sup>SM</sup>, iQmethod<sup>SM</sup> are service marks of Bank of America Corporation. iQdatabase<sup>®</sup> is a registered service mark of Bank of America Corporation.



# Disclosures

## Important Disclosures

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	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 <sup>R1</sup>	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%

<sup>R1</sup> 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.

**FUNDAMENTAL EQUITY OPINION KEY:** Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> 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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