

Server & Enterprise Software

4Q SMID software preview: Most positive on infra software stocks; least on XCaaS

Price Objective Change

Expect beats in infrastructure subsector, less so in XCaaS

Into 4Q23 earnings, we are most positive on the infrastructure software subsector, given AI demand tailwinds, optimizations mostly heading to the rearview mirror, and attractive usage-based pricing models displaying growth upside faster and at a greater magnitude than seat-based subscription based peers. We highlight Buy-rated SMID infrastructure stocks: Dynatrace (DT), Informatica (INFA), and JFrog (FROG). We are most cautious on the XCaaS subsegment given the risks of macro related pressures continuing to be a headwind, resulting in smaller deal sizes and downsales, as seen in [8x8's \(EGHT\)](#) results last week. We could see similar results from Underperform-rated Five9 (FIVN) and Twilio (TWLO).

Spotlight: DT - Expect good results, ARR guide is key

We reiterate Buy on Dynatrace (DT) and raise our PO to \$70 (from \$60), as we expect good results when the company reports F3Q24 results on 2/8 after attending its [annual Perform conference](#) last week. Checks suggest improving demand and end-market positioning, which should enable the business to drive 20%+ ARR growth with healthy FCF generation over the medium-term. The key metric is ARR guidance, which we believe the bar for F4Q is 20%+. We do not expect mgmt. to provide an early FY25 look.

Spotlight: ZI – Controversial as ever

We have fielded many investor calls since we [upgraded ZoomInfo \(ZI\) to Buy](#), where we believe that sentiment is low and the bar to drive a re-rating is also low. The key risk we hear is that estimates are not done being revised lower given the accelerating pace of tech industry layoffs to begin 2024. As such, we believe the key metrics into its earnings will be 2024 guidance (revenue and uFCF margins), and RPO. We/Street model 2024E revenue growth of 1.6%/3.4% and uFCF margins of 37%/39%, respectively.

Spotlight: U – Pivotal quarter for rebuilding confidence

4Q23 is a pivotal quarter for Buy-rated Unity (U). We expect its strategic review to be largely complete when it reports on 2/26. To date, it has announced headcount reductions (we est. \$270mn annual savings), separation from Weta (we est. \$70mn in revenue) and exiting of office leases. We believe incremental news regarding business sales or separations could come before results. We view the strategic review as positioning for Unity for higher revenue growth/profitability with greater focus on core markets.

Spotlight: TWLO – Optionality outweighed by headwinds

Recent management changes and activist involvement have raised the profile for Underperform-rated TWLO into 4Q results. We believe ongoing macro and competitive pressure on TWLO's usage-based business and slower than expected customer adoption of TD&A segment products outweighs upside potential from strategic optionality. As we highlighted in the report [Breaking down the bull case](#), even an alchemist couldn't create greater value from the parts, in our view. Maintain Underperform, \$55 PO.

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Exhibit 1: PO changes in this report

We raise our DT PO to \$70

	New rating	New PO	Old rating	Old PO
DT	Buy (unch)	\$70	Buy	\$60

Source: BofA Global Research

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ARR = annual recurring revenue

RPO = remaining performance obligation

TD&A = Technology, Data, and Analytics

6 charts for 3Q SMID software earnings

Exhibit 2: BofA SMID universe vs consensus revenue growth trends

On a revenue weighted basis, we forecast a 400bps deceleration in revenue growth for CY2024. Consensus forecasts a 350bps deceleration

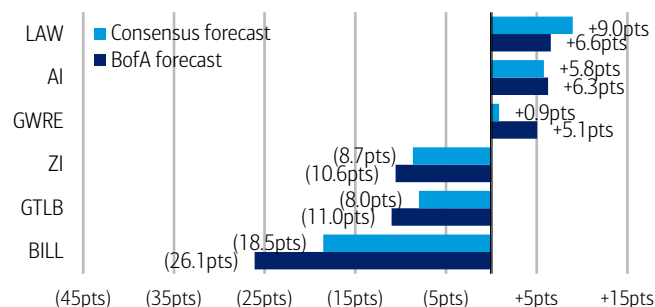
	CY2023	CY2024
BofA SMID cap universe		
Aggregate revenue	45,160	49,828
Revenue weighted growth	14.7%	10.7%
Average growth	16.6%	12.8%
Median growth	15.5%	12.6%
Consensus SMID cap universe		
Aggregate revenue	46,761	51,701
Revenue weighted growth	14.5%	11.0%
Average growth	16.2%	13.2%
Median growth	15.0%	12.4%

Source: BofA Global Research, VisibleAlpha

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Exhibit 4: Top 3 revenue growth magnitude of acceleration vs deceleration for 2024

Our LAW forecast displays the highest revenue growth acceleration for 2024, with growth accelerating to 8% from 2% in 2024

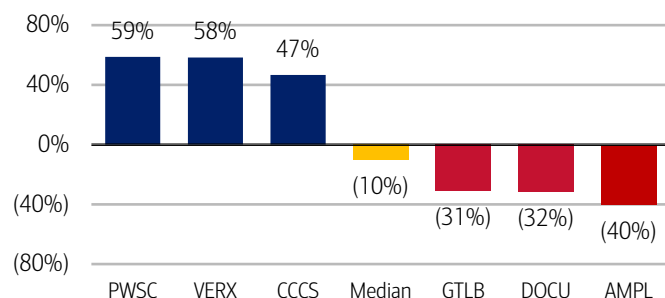


Source: BofA Global Research, VisibleAlpha

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Exhibit 6: Top 3 highest magnitude increase/decrease in short interest from 10/20/23 to 01/26/24

Since 10/20 PWSC's short interest has increased the most in our SMID universe, AMPL's has decreased the most

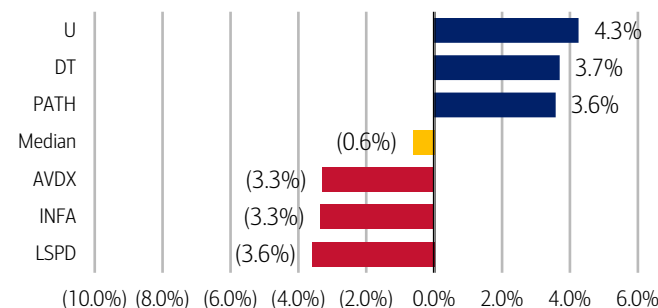


Source: BofA Global Research, Bloomberg

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Exhibit 3: Top 3 BofA revenue estimates above/ below consensus

Our Unity estimate is 4.3% above consensus

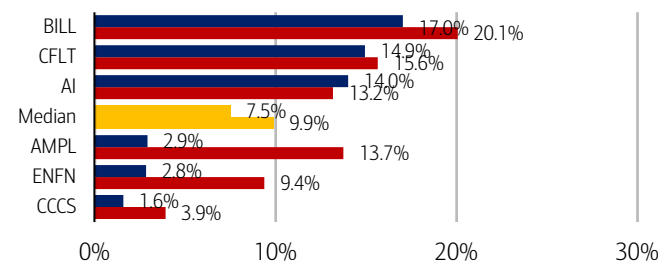


Source: BofA Global Research, VisibleAlpha

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Exhibit 5: Top 3 highest and lowest implied move compared to the trailing 8 quarter absolute average 1 day move

BILL has the highest magnitude implied move, while CCCS has the lowest magnitude implied move heading into the 4Q earnings cycle

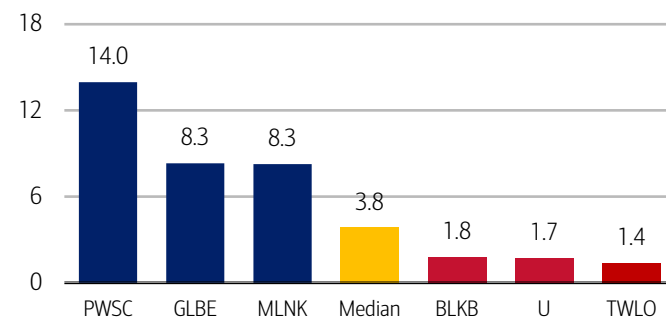


Source: BofA Global Research, Bloomberg

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Exhibit 7: Top 3 highest/lowest short interest ratio as of 01/26/24

PWSC currently has the highest days-to-cover at 14.0, while TWLO has the lowest days to cover at 1.4



Source: BofA Global Research, Bloomberg

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More thoughts into earnings

AI monetization: When does it benefit the little guys?

While 2023 was all about generative AI strategies, 2024 will see the focus shift to visible AI monetization. Last week, [Microsoft reported](#) its Azure business saw 6pts of growth from AI services (up 3pts q/q), with tailwinds coming from inference workloads, which could be a broad signal that AI products are moving from concept to adoption. This should benefit the SMID software vendors with attractive and differentiated AI offerings. Within our SMID universe, we highlight [GitLab's Duo offering](#) and CCC Intelligent Services where we could see visible AI monetization this year.

M&A Mondays return: EVBG acquired by Thoma Bravo

On 2/5, [Everbridge announced it was being acquired](#) for 3x FY25 sales (approx. \$1.5bn). Last December, [Alteryx announced it was being acquired](#) by private equity for roughly 4x FY24 ARR. Recently, there have been multiple media reports of other software companies attracting takeout suitors. While the private equity takeouts of transition businesses makes sense, if activity from the strategic acquirers heats up, it could provide valuation support for assets that are viewed to have differentiated offerings such as Elastic (ETSC), JFrog (FROG), Confluent (CFLT), and HashiCorp (HCP).

Highest implied moves: BILL, CFLT. Lowest: ENFN, CCCS

Based on Bloomberg data, stocks with the highest implied move into 3Q include: BILL at 17%, CFLT at 15%, and AI at 14%. Lowest implied moves include: AMPL at 3%, ENFN at 3%, and CCCS at 2%. See exhibit 5 for full implied moves across our SMID universe and trailing 8 quarter average absolute one day move.

Where are investors expressing more/less negativity?

Analysis of short interest data highlights stocks where investors have most significantly increased or decreased bearish views during the quarter. Stocks that have become crowded shorts since 10/20/23 include: PWSC (+59% increase in short interest), VERX (+58%), and CCCS (+47%). Highest short interest ratios are found with PWSC at 14.0 days to cover, GLBE at 8.3, MLNK at 8.3; lowest found in BLKB at 1.8, U at 1.7, and TWLO at 1.4.

PO Change

We are raising our PO for Dynatrace (DT) given a more positive view coming out of its recent user conference. Our \$70 PO is based on 57.4x EV/C24E FCF, increased from 48.9x given this. This multiple is a premium to infrastructure software peers at 43.7x, which we think is warranted given our strong revenue forecast and good execution in F2Q24.

Exhibit 8: PO changes in this report

We raise our DT PO to \$70 from \$60

	New rating	New PO	Old rating	Old PO
DT	Buy (unchanged)	\$70	Buy	\$60

Source: BofA Global Research

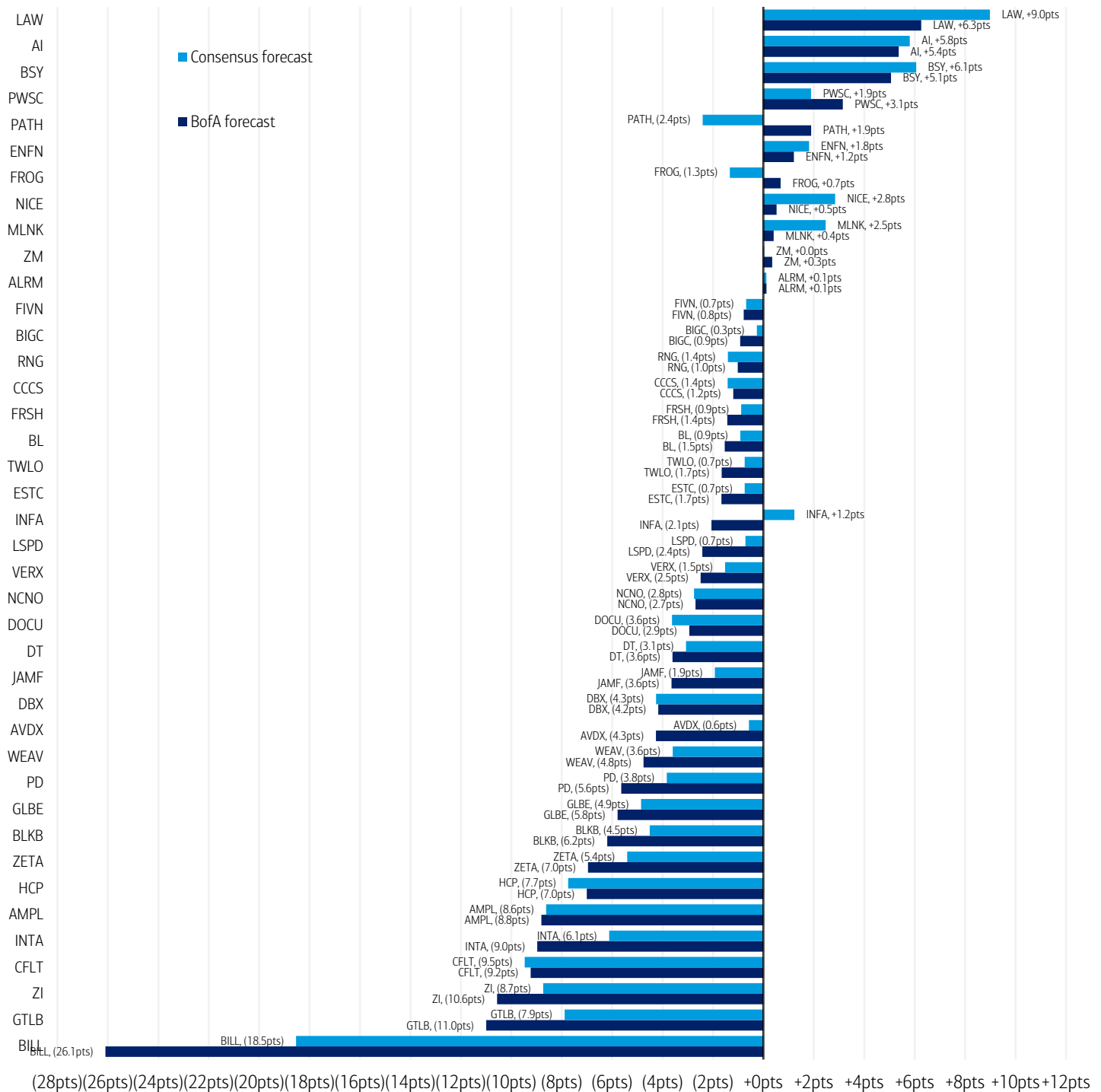
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Expanding the key charts across the BofA SMID universe

Exhibit 9: BofA vs consensus, magnitude of the revenue growth acceleration/deceleration for CY2024E

We forecast the highest revenue growth acceleration for LAW, while we forecast the greatest growth deceleration for BILL.

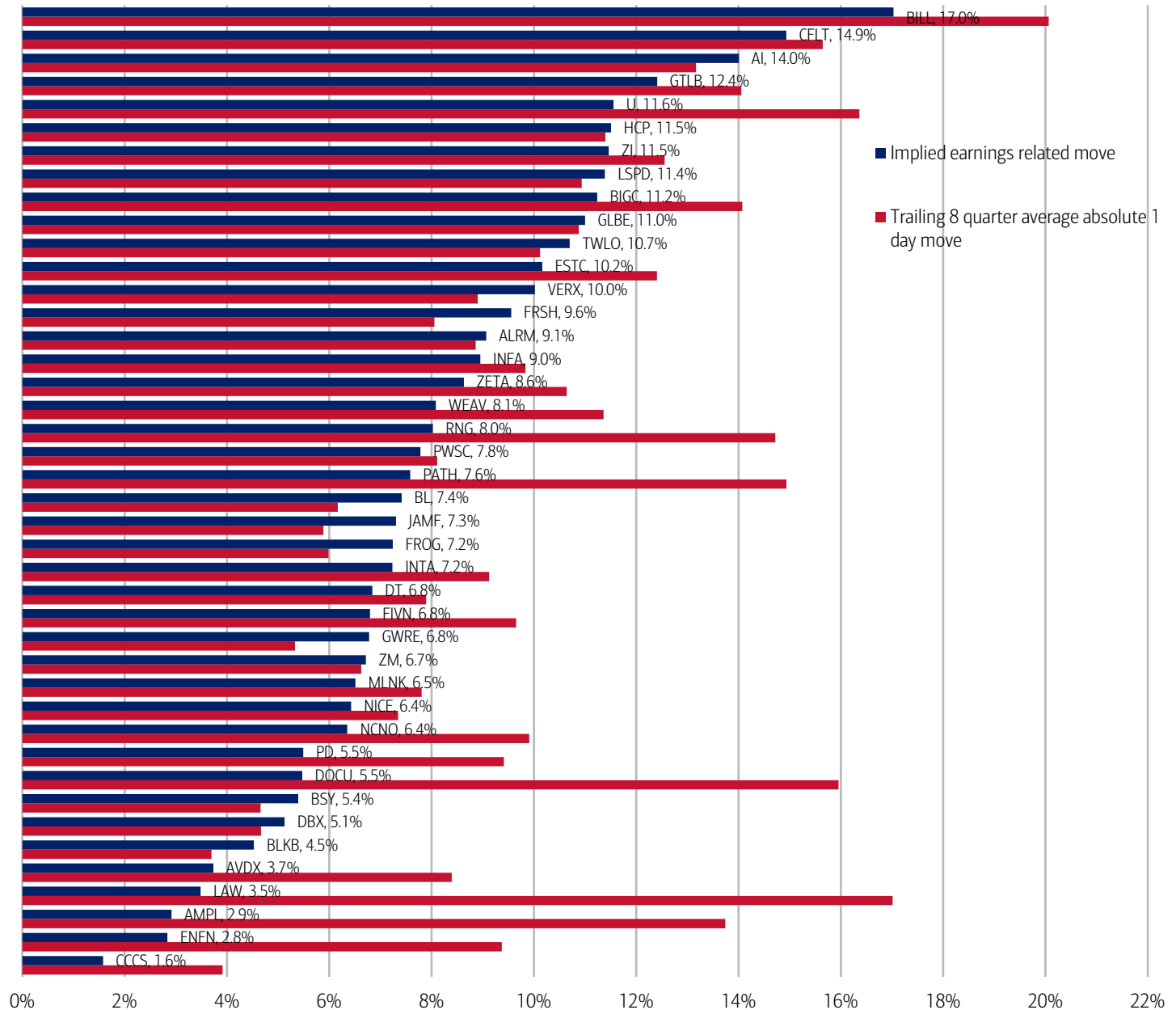


Source: BofA Global Research, VisibleAlpha

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Exhibit 10: Implied earnings-related move vs. the trailing 8 quarter absolute average 1 day move

BILL currently displays the highest implied earnings related move at 17%, while CCCS looks to have the least implied volatility at 1.6%

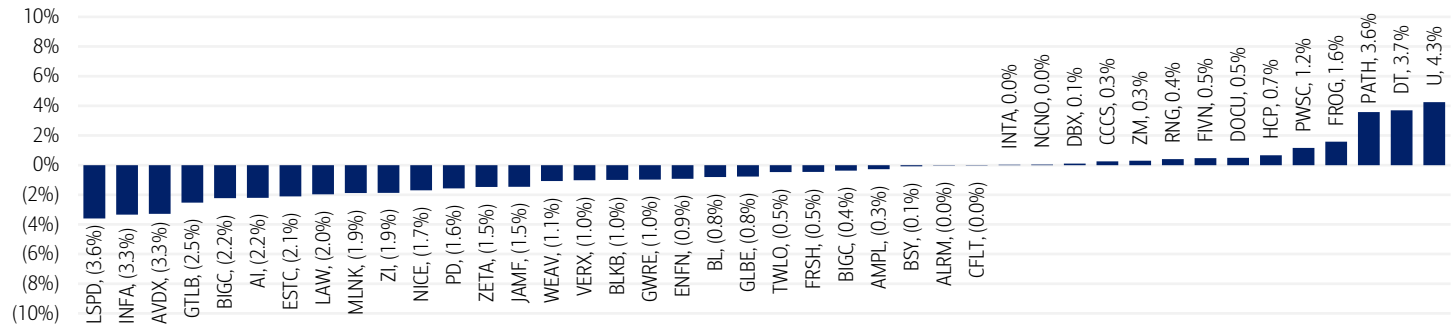


Source: BofA Global Research, Bloomberg

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Exhibit 11: Difference between BofA's 2024 revenue forecast and consensus

Our LSPD revenue forecast for CY2024 is 3.6% below the consensus, while our U forecast is 4.3% above the consensus

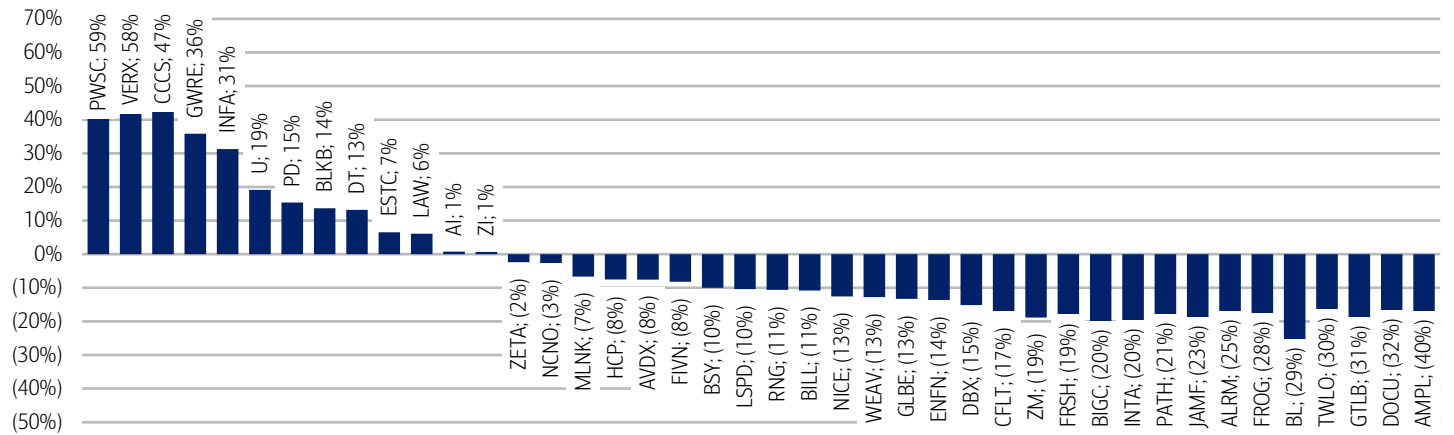


Source: BofA Global Research, VisibleAlpha

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BofA SMID universe short interest analysis**Exhibit 12: Change in short interest 10/20/23 to 01/26/24**

PWSC is displaying the highest absolute increase in short interest at 59%, while AMPL is displaying the greatest decline in absolute short interest at (40%)

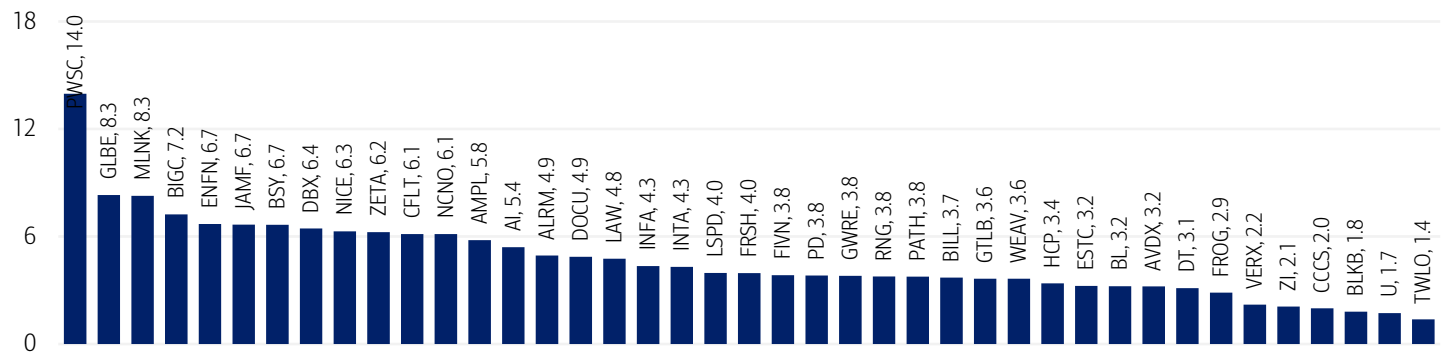


Source: BofA Global Research, Bloomberg

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Exhibit 13: Short interest ratio as of 01/26/24

PWSC currently displays the highest days-to-cover at 14, while TWLO displays the lowest at 1.4 days



Source: BofA Global Research, Bloomberg

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M&A environment is a valuation backstop

Exhibit 14: Private Equity transactions

The average EV/TTM revenue multiple for private equity transactions in 2023 was 7.3x

Announce Date	Target Name	Acquirer Name	Deal Value (mil.)	EV/TTM sales	EV/TTM EBITDA	EV/FCF
1/9/2020	Veeam Software Corp	Insight Venture Partners LP	5,000			
11/10/2020	Planview Inc	TPG Capital, TA Associates Management	1,600			
12/2/2020	CommerceHub Inc	Insight Venture Partners LP	1,900	16.8x	61.6x	51.7x
12/13/2020	Pluralsight Inc	Vista Equity Partners LLC	2,862	7.3x		
12/21/2020	RealPage Inc	Thoma Bravo LLC	9,753	8.4x	37.7x	45.8x
3/10/2021	Talend SA	Thoma Bravo LLC	2,151	6.9x		
6/1/2021	Cloudera Inc	Clayton Dubilier & Rice LLC, KKR & Co Inc	4,610	5.1x		31.6x
6/28/2021	QAD Inc	Thoma Bravo LLC	1,719	5.2x	97.8x	55.5x
7/26/2021	Medallia Inc	Thoma Bravo LLC	5,477	10.4x		
8/5/2021	Cornerstone OnDemand Inc	Clearlake Capital Group LP	4,840	5.8x	25.8x	53.1x
9/23/2021	athenahealth Inc	Bain Capital Private Equity LP, Hellman & Friedman LLC	17,000	13.0x	53.4x	105.6x
9/28/2021	Blue Prism Group plc	Vista Equity Partners LLC	1,471	7.3x		
1/31/2022	Citrix Systems Inc	Vista Equity Partners LLC, Elliot Investment	14,475	4.5x	19.1x	24.6x
3/20/2022	Anaplan Inc	Thoma Bravo LLC	10,400	16.5x		
4/11/2022	Sailpoint Technologies Holdings	Thoma Bravo LLC	6,131	14.0x		
6/24/2022	Zendesk, Inc.	Hellman & Friedman, Permira	10,200	7.1x		88.4x
8/3/2022	Ping Identity	Thoma Bravo LLC	2,800	9.1x		
8/8/2022	Avalara, Inc.	Vista Equity Partners LLC	8,400	11.2x		
9/28/2022	Billtrust Holding Inc.	EQT AB	1,413	7.9x		
10/27/2022	UserTesting Inc.	Thoma Bravo LLC, Sunstone Partners Management Inc.	920	5.0x		
12/12/2022	Coupa Software Inc.	Thoma Bravo LLC	8,000	9.8x	97.4x	40.7x
1/9/2023	Duck Creek Technologies, Inc.	Vista Equity Partners LLC	2,600	8.4x	309.5x	91.9x
1/23/2023	Magnet Forensics	Thoma Bravo LLC	1,340	13.5x	103.9x	42.9x
2/9/2023	Sumo Logic	Francisco Partners	1,700	5.7x		
3/13/2023	Momentive Global	Consortium led by Symphony Technology Group LLC	1,446	3.0x	37.8x	
3/13/2023	Qualtrics International Inc.	Silver Lake, Canada Pension Plan Investment Board	12,500	8.6x	80.5x	
3/14/2023	Cvent Holding Corp	Blackstone Inc, Abu Dhabi Investment Authority	4,235	6.4x	67.2x	57.7x
5/11/2023	Absolute Software Corp	Crosspoint Capital Partner LP	830	3.7x	24.3x	22.5x
7/31/2023	New Relic	TPG Capital, Francisco Partners	6,500	7.0x	66.4x	192.3x
10/23/2023	Engagesmart Inc.	Vista Equity Partners LLC	4,000	11.6x	82.1x	79.2x
12/18/2023	Alteryx	Clearlake Capital Group LP and Insight	4,400	4.8x	68.2x	
2/5/2024	Everbridge	Thoma Bravo LLC	1,500	3.4x	21.8x	50.1x
Average (2016 - 2024)				7.2x	45.7x	44.3x
Average (2023)			39,551	7.3x	60.9x	49.0x
Average (2022)			62,738	9.4x	58.3x	51.2x
Average (2021)			37,269	7.7x	59.0x	46.8x
Average (2019)			5,063	5.3x	13.3x	24.7x

Source: BofA Global Research, Bloomberg

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Exhibit 15: Strategic transactions

The average EV/TTM revenue multiple for strategic transactions in 2023 was 8.9x

Announce Date	Target Name	Acquirer Name	Deal Value (mil.)	EV/TTM Sales	EV/TTM EBITDA	EV/FCF
2/24/2020	Credit Karma Inc	Intuit Inc	7,100			
2/24/2020	Saba Software Inc	Cornerstone OnDemand Inc	1,295	10.7x		606.8x
2/25/2020	Vlocity Inc	salesforce.com Inc	1,330			
9/28/2020	MobileIron Inc	Ivanti Inc	749	3.5x		
10/12/2020	Segment.io Inc	Twilio Inc	3,200			
11/2/2020	LLamasoft Inc	Coupa Software Inc	1,500			
11/9/2020	Workfront Inc	Adobe Inc	1,500			
12/1/2020	Slack Technologies Inc	salesforce.com Inc	25,766	26.4x		414.2x
1/28/2021	Peakon ApS	Workday Inc	700			
2/24/2021	Innovyze Inc	Autodesk Inc	1,000			
4/12/2021	Nuance Communications Inc	Microsoft Corp	17,241	12.7x	85.0x	90.2x
4/23/2021	Blue Yonder Group Inc	Panasonic Corp	7,100	10.6x	60.1x	78.6x
5/7/2021	DivvyPay Inc	Bill.com Holdings Inc	2,500			
5/11/2021	Seequent	Bentley Systems	1,050			
5/17/2021	Zipwhip Inc	Twilio Inc	850			
7/29/2021	Clarabridge Inc	Qualtrics International Inc	1,125			
8/18/2021	HazardHub	Guidewire Software Inc	53			
10/11/2021	Aspen Technology Inc	Emerson Electric Co	8,497	11.6x	22.1x	31.0x
11/9/2021	Weta Digital	Unity Software	1,600			
11/17/2021	SimpleNexus LLC	nCino Inc	1,195			
11/17/2021	Power Line Systems Inc	Bentley Systems Inc	700			
11/18/2021	Vndly LLC	Workday Inc	510			
12/1/2021	Blue Prism Group plc	SS&C Technologies Holdings Inc	1,483	7.3x		
12/1/2021	Fuze	8x8 Inc.	250			
12/20/2021	Cerner Corp	Oracle Corp	29,005	5.1x	21.0x	25.2x
1/18/2022	Activision Blizzard	Microsoft Corp	68,700	6.9x	16.6x	22.3x
4/11/2022	Datto, Inc.	Kaseya Limited	6,200	10.0x	35.0x	79.4x
5/23/2022	VMware Inc.	Broadcom Inc.	61,000	4.7x	15.6x	15.3x
9/6/2022	ChannelAdvisor Corp	CommerceHub Inc	588	3.4x	26.8x	20.9x
1/25/2023	Cloudify	Dell Technologies	100			
4/14/2023	Workvivo	Zoom Video Communications Inc	215			
5/12/2023	G2K	ServiceNow	500			
5/24/2023	Neeva	Snowflake Inc.	150			
6/12/2023	Adenza	Nasdaq, Inc.	10,500	17.8x		
6/26/2023	Apptio, Inc.	International Business Machines Corp	4,600	9.2x		
6/27/2023	BluBracket	HashiCorp Inc	30			
7/6/2023	Paperspace	DigitalOcean	111			
7/31/2023	Rookout	Dynatrace Inc	55			
8/3/2023	Tagger Media	Sprout Social Inc	140			
8/7/2023	Aceyus	Five9 Inc	82			
8/9/2023	Hopin	RingCentral Inc	50			
9/21/2023	Splunk Inc.	Cisco System Inc.	29,400	7.7x	34.7x	36.5x
10/4/2023	LiveVox	NICE Ltd.	350	2.4x		
10/12/2023	Loom Inc.	Atlassian Corp	975			
1/5/2024	ANSYS Inc.	Synopsys Inc.	34,986	16.2x	48.6x	55.3x
1/11/2024	Pagero	Thomson Reuters	789	1.1x		
Average All (2016 - 2023)				8.9x	42.4x	52.0x
Average (2023)			47,258	9.3x	34.7x	36.5x
Average (2022)			136,488	6.3x	23.5x	34.5x
Average (2021)			74,859	9.5x	47.0x	56.2x
Average (2020)			42,440	13.5x	NA	NA

Source: BofA Global Research, Bloomberg

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BofA SMID cap universe comp sheet

Exhibit 16: BofA Software SMID cap comp sheet

The SMID cap group trades at 5.4x EV/2024 sales

SMID cap	Company	Price	Mkt Cap (\$mn)	EV/2023	EV/2024	EV/2025	2023	2024	2025	EV/2023	EV/2024	EV/2025	2023	2024	2025
				Sales	Sales	Sales	EV/Rev/ Growth	EV/Rev/ Growth	EV/Rev/ Growth	FCF	FCF	FCF	EV/FCF/ Growth	EV/FCF/ Growth	EV/FCF/ Growth
AI	C3 AI INC-A	\$24.12	2,862	7.3x	6.3x	5.5x	0.7x	0.4x	0.4x	...	...	43.5x	...	...	...
ALRM	ALARM.COM HOLDINGS INC	\$61.57	3,373	3.7x	3.5x	3.2x	0.8x	0.8x	0.4x	29.1x	58.4x	22.3x	0.1x	...	0.1x
AMPL	AMPLITUDE INC-CLASS A	\$13.21	1,928	5.8x	5.4x	5.0x	0.4x	0.7x	0.5x	72.8x	64.4x	52.3x	...	5.0x	2.3x
AVDX	AVIDXCHANGE	\$11.28	2,256	5.2x	4.6x	3.9x	0.3x	0.3x	0.2x	...	...	40.2x	...	...	0.2x
AYX	ALTERYX INC - CLASS A	\$47.52	3,388	4.2x	3.8x	3.4x	0.4x	0.3x	0.3x	...	75.8x	37.5x	...	0.6x	0.4x
BIGC	BIGCOMMERCE HOLDINGS-SER 1	\$7.98	607	2.3x	2.1x	1.9x	0.2x	0.2x	0.2x	...	47.6x	30.1x	...	...	0.5x
BILL	BILL HOLDINGS INC	\$75.97	8,115	6.3x	5.7x	4.7x	0.2x	0.5x	0.2x	61.9x	41.4x	32.9x	0.8x	0.8x	1.3x
BL	BLACKLINE INC	\$58.41	4,355	7.4x	6.7x	6.0x	0.6x	0.6x	0.5x	40.1x	34.2x	27.9x	0.3x	2.0x	1.2x
BLKB	BLACKBAUD INC	\$79.22	4,212	4.5x	4.2x	4.0x	0.9x	0.7x	0.7x	23.7x	20.9x	18.4x	0.4x	1.6x	1.3x
CFLT	CONFLUENT INC-CLASS A	\$23.75	7,740	9.1x	7.5x	5.9x	0.3x	0.3x	0.2x	...	...	...	...	...	...
DBX	DROPBOX INC-CLASS A	\$32.49	11,242	4.9x	4.7x	4.5x	0.7x	1.4x	1.2x	15.6x	12.7x	11.6x	6.7x	0.5x	1.3x
DOCU	DOCUSIGN INC	\$53.21	11,071	3.8x	3.5x	3.3x	0.4x	0.6x	0.5x	14.2x	13.4x	12.3x	0.2x	2.1x	1.4x
EGHT	8X8 INC	\$2.71	332	1.0x	1.0x	0.9x	...	...	0.2x	6.5x	4.3x	3.5x	0.0x	0.1x	0.1x
ENFN	ENFUSION	\$7.83	1,001	5.7x	4.9x	4.2x	0.4x	0.3x	0.3x	51.4x	47.4x	32.0x	0.2x	5.6x	0.7x
ELSTC	ELASTIC NV	\$122.26	12,531	9.6x	8.3x	7.1x	0.6x	0.5x	0.4x	...	64.6x	48.9x	...	0.7x	1.5x
EVBG	EVERBRIDGE INC	\$28.17	1,240	3.4x	3.2x	3.0x	0.9x	0.6x	0.5x	56.3x	35.9x	25.3x	0.0x	0.6x	0.6x
FIVN	FIVE9 INC	\$73.48	5,193	5.8x	5.0x	4.2x	0.3x	0.3x	0.2x	62.4x	40.2x	26.4x	0.4x	0.7x	0.5x
FROG	JFROG LTD	\$35.79	3,944	10.0x	8.1x	6.5x	0.4x	0.3x	0.3x	65.8x	48.8x	34.1x	0.3x	1.4x	0.8x
FRSH	FRESHWORKS INC-CL A	\$21.66	6,996	9.9x	8.4x	7.1x	0.5x	0.5x	0.4x	81.9x	49.3x	36.0x	...	0.7x	1.0x
GLBE	GLOBAL-E ONLINE LTD	\$38.91	6,964	11.9x	9.0x	6.6x	0.3x	0.3x	0.2x	63.8x	49.6x	33.1x	1.6x	1.7x	0.7x
GTLB	GITLAB INC-CL A	\$71.97	11,868	19.0x	15.3x	11.9x	0.5x	0.6x	0.4x	...	...	...	...	...	...
GWRE	GUIDEWIRE SOFTWARE INC	\$112.18	9,164	9.6x	8.6x	7.6x	1.5x	0.7x	0.6x	...	54.7x	42.0x	...	0.4x	1.4x
HCP	HASHICORP INC-CL A	\$22.90	4,456	5.6x	4.9x	4.1x	0.3x	0.3x	0.2x	...	38.7x	25.3x	...	...	0.5x
INFA	INFORMATICA	\$30.25	8,971	6.3x	6.1x	5.7x	1.3x	2.1x	0.7x	40.8x	32.7x	27.8x	1.8x	1.3x	1.6x
INTA	INTAPP INC	\$44.82	3,566	8.8x	7.5x	6.5x	0.3x	0.4x	0.4x	96.0x	63.4x	45.5x	1.1x	1.2x	1.2x
JAMF	JAMF HOLDING CORP	\$18.63	2,533	4.8x	4.2x	3.7x	0.3x	0.3x	0.3x	62.1x	40.7x	26.0x	...	0.8x	0.5x
LAW	CS DISCO INC	\$8.39	544	2.9x	2.7x	2.4x	1.7x	0.3x	0.2x	...	...	...	...	...	...
LSPD	LIGHTSPEED COMMERCE INC	\$19.06	2,925	2.5x	2.1x	1.7x	0.1x	0.1x	0.1x	...	40.9x	48.9x	...	...	...
MLNK	MERIDIANLINK INC	\$22.23	1,802	7.0x	6.6x	6.2x	1.3x	1.1x	0.9x	30.4x	23.5x	20.7x	...	0.8x	1.5x
NCNO	NCINO INC	\$30.62	3,459	7.2x	6.3x	5.4x	0.4x	0.4x	0.4x	47.0x	42.1x	42.3x	...	3.6x	...
NICE	NICE LTD - SPON ADR	\$211.36	14,129	5.6x	5.1x	4.6x	0.6x	0.5x	0.4x	26.6x	21.6x	18.9x	2.5x	0.9x	1.4x
PATH	UIPATH INC - CLASS A	\$22.51	12,764	8.6x	6.9x	5.6x	0.4x	0.3x	0.2x	42.9x	38.4x	28.0x	...	3.2x	0.8x
PAYC	PAYCOM SOFTWARE INC	\$194.23	11,259	6.4x	5.8x	5.1x	0.3x	0.5x	0.4x	36.9x	30.7x	25.6x	1.4x	1.5x	1.3x
PCTY	PAYLOCITY HOLDING CORP	\$158.86	9,036	6.8x	5.8x	4.9x	0.2x	0.3x	0.3x	33.3x	28.8x	24.0x	0.5x	1.8x	1.2x
PD	PAGERDUTY INC	\$23.48	2,260	5.0x	4.5x	4.0x	0.3x	0.4x	0.3x	30.5x	22.8x	18.3x	0.1x	0.7x	0.7x
PWSC	POWERSCHOOL HOLDINGS INC-A	\$24.72	5,026	8.0x	7.0x	6.4x	0.7x	0.5x	0.7x	31.8x	26.4x	22.9x	1.6x	1.3x	1.5x
RNG	RINGCENTRAL INC-CLASS A	\$33.14	3,135	2.1x	1.9x	1.7x	0.2x	0.2x	0.1x	15.4x	11.8x	8.0x	0.1x	0.4x	0.2x
TWLO	TWILIO INC - A	\$69.14	12,943	2.4x	2.2x	2.0x	0.3x	0.4x	0.2x	68.5x	23.4x	16.7x	...	0.1x	0.4x
U	UNITY SOFTWARE INC	\$31.46	10,315	5.5x	4.8x	3.9x	0.1x	0.3x	0.2x	39.3x	18.5x	11.4x	...	0.2x	0.2x
VERX	VERTEX INC - CLASS A	\$25.28	3,844	6.8x	6.1x	5.4x	0.5x	0.5x	0.4x	87.2x	56.8x	40.1x	0.6x	1.1x	1.0x
WEAV	WEAVE COMMUNICATIONS INC	\$13.13	848	4.7x	4.1x	3.6x	0.3x	0.3x	0.3x	...	43.3x	25.3x	...	0.2x	0.4x
ZETA	ZETA GLOBAL HOLDINGS CORP-A	\$9.64	2,086	3.0x	2.6x	2.2x	0.1x	0.2x	0.2x	26.1x	18.2x	14.9x	0.6x	0.4x	0.7x
ZI	ZOOMINFO TECHNOLOGIES INC	\$15.38	6,315	5.7x	5.6x	5.2x	0.5x	3.5x	0.8x	17.7x	17.5x	16.3x	12.1x	11.5x	2.3x
Average				6.2x	5.4x	4.7x	0.5x	0.6x	0.4x	44.5x	36.9x	27.9x	1.4x	1.6x	0.9x
Median				5.7x	5.1x	4.6x	0.4x	0.4x	0.3x	40.1x	38.5x	26.2x	0.5x	0.9x	0.8x

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Key estimates: BofA vs. consensus

Exhibit 17: Alarm.com (ALRM)

We expect 4Q23 revenues of \$224.6mn

\$mn	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenues	224.6	224.7	(0.1%)	880.0	880.2	(0.0%)	920.2	920.5	(0.0%)	996.0	996.0	(0.0%)
Y/Y rev growth	7.9%	8.0%	(10bps)	4.4%	4.5%	0bps	4.6%	4.6%	0bps	8.2%	8.2%	0bps
Guidance				878.9-881.1								
EBITDA	36.2	35.2	2.7%	144.6	143.7	0.6%	149.9	149.3	0.4%	187.5	187.5	(0.0%)
EBITDA margin	16.1%	15.7%	40bps	16.4%	16.3%	10bps	16.3%	16.2%	10bps	18.8%	18.8%	0bps
Guidance				143-144								
Pro forma EPS	\$0.48	\$0.46	2.9%	\$1.92	\$1.91	0.5%	\$1.99	\$2.09	(4.5%)	\$2.50	\$2.50	0.0%
Guidance				\$1.90-\$1.92								
FCF	19.8	13.6	45.5%	110.6	104.4	5.9%	55.1	102.7	(46.3%)	144.2	144.2	(0.0%)
FCF margin	8.8%	6.1%	280bps	12.6%	11.9%	70bps	6.0%	11.2%	(520bps)	14.5%	14.5%	0bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 18: AvidXchange (AVDX)

We expect 4Q23 revenues of \$98.4mn

\$thousands	4Q23			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	98,377	98,688	(0.3%)	375,033	375,338	(0.1%)	428,608	443,163	(3.3%)	497,475	518,785	(4.1%)
y/y change %	14.2%	14.5%	(36bps)	18.6%	18.6%	(10bps)	14.3%	18.1%	(378bps)	16.1%	17.1%	(100bps)
Guidance				374,500 - 375,500								
PF Operating income	7,481	8,060	(7.2%)	22,351	22,867	(2.3%)	43,548	50,391	(13.6%)	83,434	99,660	(16.3%)
PF operating margin	7.6%	8.2%	(56bps)	6.0%	6.1%	(13bps)	10.2%	11.4%	(121bps)	16.8%	19.2%	(244bps)
Guidance				22,000 - 23,000								
PF EPS	\$0.00	\$0.02	NA	\$0.01	\$0.03	(184.2%)	\$0.07	\$0.14	(93.2%)	\$0.23	\$0.34	(46.7%)
Free cash flow	20,929	6,980	66.6%	(2,961)	(16,325)	451.3%	421	18,177	(4218.5%)	37,816	55,665	(47.2%)
FCF margin	21.3%	7.1%	1420bps	(0.8%)	(4.3%)	356bps	0.1%	4.1%	(400bps)	7.6%	10.7%	(313bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 19: Amplitude (AMPL)

We expect 4Q23 revenues of \$71.6mn

	4Q23E			FY23E			FY24E			FY25E		
	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus
Total Revenue	71,575	71,544	0.0%	276,456	276,421	0.0%	296,686	297,125	(0.1%)	323,845	336,470	(3.8%)
Y/Y change %	9.7%	9.6%	5bps	16.1%	16.1%	1bps	7.3%	7.5%	(17bps)	9.2%	13.2%	(409bps)
Guidance	71,300-71,900			276,200 - 276,800								
PF Operating income	1,621	1,642	(1.3%)	(4,232)	(4,173)	(1.4%)	7,550	6,256	20.7%	14,509	16,643	(12.8%)
PF operating margin	2.3%	2.3%	(3bps)	(1.5%)	(1.5%)	(2bps)	2.5%	2.1%	44bps	4.5%	4.9%	(47bps)
Guidance	1,300-1,900			(4,500) - (3,900)								
PF EPS (loss)	\$0.03	\$0.03	(4.2%)	\$0.06	\$0.06	(5.8%)	\$0.14	\$0.13	12.4%	\$0.19	\$0.18	4.8%
Weighted average shares outstanding	117.0			120.6			121.8			121.8		
Guidance	\$0.02 - \$0.03			\$0.05 - \$0.06								
Free cash flow	(825)	(335)	(146.3%)	20,140	21,800	(7.6%)	22,114	21,419	3.2%	27,662	31,446	(12.0%)
Free cash flow margin	(1.2%)	(0.5%)	(68bps)	7.3%	7.9%	(60bps)	7.5%	7.2%	24bps	8.5%	9.3%	(80bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 20: Bentley Systems (BSY)

We expect 4Q23 revenues of \$315.3mn

	4Q23E			FY23E			FY24E			FY25E		
\$mn	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Revenue	315.3	311.6	1.2%	1,233.1	1,229.4	0.3%	1,362.6	1,363.7	(0.1%)	1,501.6	1,507.1	(0.4%)
Y/Y rev growth	9.9%	8.6%	129bps	12.2%	11.9%	34bps	10.5%	10.9%	(42bps)	10.2%	10.5%	(32bps)
Guidance				1,205-1,235								
FCF	42.5	25.7	65.0%	353.2	336.5	50%	404.6	372.9	8.5%	478.3	442.0	8.2%
FCF margin	13.5%	8.3%	521bps	28.6%	27.4%	127bps	29.7%	27.3%	235bps	31.9%	29.3%	252bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 21: BigCommerce (BIGC)

We expect 4Q23 revenues of \$81.7mn

	4Q23E			FY23E			FY24E			FY25E		
	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus
Total revenue	81,722	81,367	0.4%	306,967	306,612	0.1%	334,805	336,065	(0.4%)	365,349	372,608	(1.9%)
Y/Y change %	12.8%	12.3%	49bps	10.0%	9.9%	13bps	9.1%	9.6%	(54bps)	9.1%	10.9%	(175bps)
Guidance	79,800-83,800			304,000-309,000								
PF operating income (loss)	2,860	2,666	7.3%	(8,153)	(8,348)	2.3%	11,517	14,524	(20.7%)	19,389	25,960	(25.3%)
Operating Margin	3.5%	3.3%	22bps	(2.7%)	(2.7%)	7bps	3.4%	4.3%	(88bps)	5.3%	7.0%	(166bps)
Guidance	1,100-4,100			(9,900) - (6,900)								
Adjusted EBITDA	5,011	3,841	30.4%	(668)	(4,251)	84.3%	(7,606)	20,155	(137.7%)	1,487	30,697	(95.2%)
Adjusted EBITDA margin	6.1%	4.7%	141bps	(0.2%)	(1.4%)	117bps	(2.3%)	6.0%	(827bps)	0.4%	8.2%	(783bps)
EPS (Pro Forma)	\$0.06	\$0.05	23.8%	(\$0.01)	(\$0.03)	189.1%	\$0.25	\$0.24	4.0%	\$0.35	\$0.38	(9.9%)
Cash Flow from Operations	4,045	4,429	(9.5%)	(33,477)	(33,243)	(0.7%)	19,561	21,404	(9.4%)	28,499	36,658	(28.6%)
OCF margin	4.9%	5.4%	(49bps)	(10.9%)	-10.8%	(6bps)	5.8%	6.4%	(53bps)	7.8%	9.8%	(204bps)
Free cash flow	2,940	(11,153)	479.4%	(37,717)	(66,114)	75.3%	14,539	17,330	(19.2%)	23,019	32,096	(39.4%)
FCF margin	3.6%	(13.7%)	1731bps	(12.3%)	(21.6%)	928bps	4.3%	5.2%	(81bps)	6.3%	8.6%	(231bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 22: BILL Holdings (BILL)

We expect 4Q23 revenues of \$298.1mn

	4Q24E			FY24E			FY25E			FY26E		
\$thousands	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	298,112	298,075	0.0%	1,225,191	1,227,309	(0.2%)	1,419,601	1,421,621	(0.1%)	1,752,132	1,733,918	1.1%
y/y change %	14.7%	14.6%	1bps	15.8%	16.0%	(20bps)	15.9%	15.8%	4bps	23.4%	22.0%	146bps
Guidance	293,000 - 303,000			1,205,000 - 1,245,000								
PF Operating income	21,844	25,477	(14.3%)	120,916	133,552	(9.5%)	166,650	195,216	(14.6%)	251,857	280,484	(10.2%)
PF operating margin	7.3%	8.5%	(122bps)	9.9%	10.9%	(101bps)	11.7%	13.7%	(199bps)	14.4%	16.2%	(180bps)
PF EPS	\$0.40	\$0.41	(3.2%)	\$1.81	\$1.90	(5.2%)	\$1.97	\$2.22	(12.9%)	\$2.55	\$2.75	(8.0%)
Guidance	\$0.35 - \$0.44			\$1.64 - \$1.97								
Free cash flow	(25,166)	29,334	(216.6%)	103,948	179,477	(72.7%)	144,876	242,960	(67.7%)	250,905	304,262	(21.3%)
FCF margin	(8.4%)	9.8%	(1828bps)	8.5%	14.6%	(614bps)	10.2%	17.1%	(688bps)	14.3%	17.5%	(323bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 23: Blackbaud (BLKB)

We expect 4Q23 revenues of \$302.1mn

	4Q23E			FY23E			FY24E			FY25E		
	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus
Total Revenue	302,137	299,200	1.0%	1,112,558	1,109,621	0.3%	1,179,244	1,191,127	(1.0%)	1,249,989	1,280,111	(2.4%)
Y/Y change %	10.0%	8.9%	107bps	5.1%	4.9%	28bps	6.0%	7.3%	(135bps)	6.0%	7.5%	(147bps)
Guidance				1,095,000-1,125,000								
EBITDA adj. (non GAAP)	94,923	92,930	2.1%	345,148	344,555	0.2%	388,052	396,167	(2.0%)	434,878	438,345	(0.8%)
Adjusted EBITDA margin	31.4%	31.1%	36bps	31.0%	31.1%	(3bps)	32.9%	33.3%	(35bps)	34.8%	34.2%	55bps
Guidance				30.5%-31.5%								
EPS (Pro Forma)	\$1.08	\$1.05	2.6%	\$3.89	\$3.87	0.4%	\$4.51	\$4.57	(1.3%)	\$5.06	\$5.17	(2.3%)
Guidance				\$3.63-3.94								
Free cash flow	55,993	25,140	55.1%	210,069	179,216	14.7%	237,786	241,185	(1.4%)	270,622	274,588	(1.5%)
FCF margin	18.5%	8.4%	1013bps	18.9%	16.2%	273bps	20.2%	20.2%	(8bps)	21.6%	21.5%	20bps
Guidance				190,000-210,000								

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 24: Blackline (BL)

We expect 4Q23 revenues of \$154.0mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Revenue	154,031	154,260	(0.1%)	588,297	588,526	(0.0%)	652,779	657,208	(0.7%)	725,136	734,535	(1.3%)
Y/Y change %	10.1%	10.2%	(16bps)	12.5%	12.5%	(4bps)	11.0%	11.7%	(71bps)	11.1%	11.8%	(68bps)
Guidance	153,000-155,000			587,500-589,500								
PF Operating Income	27,340	29,063	(5.9%)	86,295	88,018	(2.0%)	104,302	114,509	(8.9%)	123,099	143,782	(14.4%)
PF Operating Margin	17.8%	18.8%	(109bps)	14.7%	15.0%	(29bps)	16.0%	17.4%	(145bps)	17.0%	19.6%	(260bps)
Adjusted EBITDA	32,881	35,927	(8.5%)	100,106	118,172	(15.3%)	130,597	142,420	(8.3%)	152,104	153,868	(1.1%)
Adjusted EBITDA margin	21.3%	23.3%	(194bps)	17.0%	20.1%	(306bps)	20.0%	21.7%	(166bps)	21.0%	20.9%	3bps
PF EPS	\$0.55	\$0.51	8.1%	\$1.81	\$0.51	256.4%	\$1.97	\$0.51	286.9%	\$2.15	\$0.51	324.2%
Guidance	\$0.52-0.58			\$1.79-1.84								
Free cash flow	22,651	31,068	(27.1%)	86,331	93,804	(8.0%)	104,360	127,462	(18.1%)	130,671	153,123	(14.7%)
FCF margin	14.7%	20.1%	(543bps)	14.7%	15.9%	(126bps)	16.0%	19.4%	(341bps)	18.0%	20.8%	(283bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 25: CCC Intelligent Solutions (CCCS)

We expect 4Q23 revenues of \$222.9mn

\$mn	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Revenue	222.9	222.7	0.1%	860.7	860.5	0.0%	936.4	934.0	0.3%	1,018.2	1,011.1	0.7%
Y/Y rev growth	9.2%	9.1%	10bps	10.0%	10.0%	3bps	10.0%	8.5%	145bps	8.7%	8.3%	49bps
Guidance	221.5-223.5			859-861								
Adj. EBITDA	92.7	93.0	(0.3%)	346.0	346.3	(0.1%)	372.2	382.0	(2.6%)	409.5	421.6	(2.9%)
Adjusted EBITDA margin	41.6%	41.8%	(18bps)	40.2%	40.2%	(4bps)	39.8%	40.9%	(115bps)	40.2%	41.7%	(149bps)
Guidance	92-94mn			345-347								
Free Cash Flow	69.9	67.7	3.3%	189.8	187.4	1.3%	242.8	221.9	9.4%	264.4	254.4	3.9%
FCF margin	31.4%	30.4%	97bps	22.1%	21.8%	27bps	25.9%	23.8%	217bps	26.0%	25.2%	80bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 26: Confluent (CFLT)

We expect 4Q23 revenues of \$204.5mn

	4Q23E			FY23E			FY24E			FY25E		
\$thousands	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	204,507	205,217	(0.3%)	768,275	768,985	(0.1%)	936,391	936,371	0.0%	1,177,382	1,166,045	1.0%
y/y change %	21.2%	21.7%	(42bps)	31.1%	31.2%	(12bps)	21.9%	21.8%	12bps	25.7%	24.5%	121bps
Guidance	204,000 - 205,000			768,000 - 769,000								
PF Operating income	949	1,148	(17.4%)	(67,644)	(67,418)	(0.3%)	150	2,959	(94.9%)	47,336	65,445	(27.7%)
PF operating margin	0.5%	0.6%	(10bps)	(8.8%)	(8.8%)	(4bps)	0.0%	0.3%	(30bps)	4.0%	5.6%	(159bps)
	0% - 1%			(9.0%)								
PF EPS	\$0.05	\$0.05	0.6%	(\$0.01)	(\$0.00)	(49.4%)	\$0.24	\$0.16	30.3%	\$0.36	\$0.29	17.7%
Guidance	\$0.50			\$(0.01) - \$0.00								
Free cash flow	39,254	4,422	88.7%	(91,902)	(125,624)	36.7%	550	5,602	(919.3%)	61,537	71,613	(16.4%)
FCF margin	19.2%	2.2%	1704bps	(12.0%)	(16.3%)	437bps	0.1%	0.6%	(54bps)	5.2%	6.1%	(91bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 27: Dropbox (DBX)

We expect 4Q23 revenues of \$631.5mn

	4Q23E			2023E			2024E			2025E		
\$mn	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Revenue	631.5	631.1	0.0%	2,498.1	2,497.7	0.0%	2,579.9	2,577.1	0.1%	2,680.1	2,679.3	0.0%
Y/Y rev growth	5.5%	5.4%	5bps	7.4%	7.4%	1bps	3.3%	3.2%	10bps	3.9%	4.0%	(8bps)
Guidance	629-632			2,496-2,499								
Free cash flow	212.1	212.5	(0.2%)	781.2	781.6	(0.0%)	963.3	960.5	0.3%	1,048.8	1,027.6	2.1%
FCF margin	33.6%	33.7%	(8bps)	31.3%	31.3%	(2bps)	37.3%	37.3%	7bps	39.1%	38.4%	78bps
Guidance				775-785								

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 28: Dynatrace (DT)

We expect 3Q24 revenues of \$338.7mn

	3Q24E			FY24E			FY25E			FY26E		
	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus
Revenue build												
Subscription Revenue	338,712	339,013	(0.1%)	1,339,299	1,340,940	(0.1%)	1,592,561	1,603,426	(0.7%)	1,895,319	1,917,161	(1.1%)
Y/Y change %	21.3%	21.4%	-11bps	23.6%	23.8%	-15bps	18.9%	19.6%	-66bps	19.0%	19.6%	-56bps
Guidance	337,000-340,000			1,334,000-1,344,000								
Services Revenue	18,807	18,637	0.9%	74,661	73,875	1.1%	82,128	79,043	3.9%	90,340	82,638	9.3%
Y/Y change %	2.8%	1.8%	+93bps	(0.7%)	-1.8%	+105bps	10.0%	7.0%	+301bps	10.0%	4.5%	+545bps
Reported ARR, end of period	1,411,299	1,410,212	0.1%	1,484,654	1,499,332	(1.0%)	1,780,005	1,790,017	19.4%	2,134,506	2,160,860	20.7%
Y/Y change %	(100.0%)	0.2	-12130bps	(100.0%)	0.2	-12027bps	#DIV/0!	0.2	#DIV/0!	#DIV/0!	0.2	#DIV/0!
Guidance				1,480,000-1,490,000								
Total Revenues	357,519	357,704	(0.1%)	1,413,960	1,415,003	(0.1%)	1,674,689	1,682,468	(0.5%)	1,985,659	1,999,798	(0.7%)
Y/Y change %	20.2%	20.3%	-6bps	22.0%	22.1%	-9bps	18.4%	18.9%	-46bps	18.6%	18.9%	-29bps
Guidance				1,409,000-1,419,000								
Income from operations	95,296	95,712	(0.4%)	381,532	382,412	(0.2%)	457,928	454,940	0.7%	545,233	556,501	(2.0%)
Operating Margin	26.7%	26.8%	-10bps	27.0%	27.0%	-4bps	27.3%	27.0%	+30bps	27.5%	27.8%	-37bps
Guidance	94,000-97,000			377,000-386,000								
EPS (Pro Forma)	\$0.28	\$0.28	(0.4%)	\$1.11	\$1.11	(0.6%)	\$1.22	\$1.27	(4.2%)	\$1.40	\$1.50	(6.9%)
Guidance	\$0.27-\$0.28			\$1.09-\$1.12								
Free cash flow	47,576	55,351	(16.3%)	316,880	319,629	(0.9%)	389,341	398,916	(2.5%)	485,119	505,819	(4.3%)
FCF margin	13.3%	15.5%	-217bps	22.4%	22.6%	-18bps	23.2%	23.7%	-46bps	24.4%	25.3%	-86bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 29: Enfusion (ENFN)

We expect 4Q23 revenues of \$44.8mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Revenue	44,848	45,125	(0.6%)	172,897	173,174	(0.2%)	200,911	203,238	(1.1%)	233,835	242,880	(3.7%)
Y/Y change %	10.7%	11.4%	(69bps)	15.0%	15.2%	(18bps)	16.2%	17.4%	(116bps)	16.4%	19.5%	(312bps)
Guidance				170,000-175,000								
PF Operating Income	6,978	7,208	(3.2%)	20,846	21,114	(1.3%)	30,580	34,726	(11.9%)	38,876	46,620	(16.6%)
PF Operating Margin	15.6%	16.0%	(41bps)	12.1%	12.2%	(14bps)	15.2%	17.1%	(187bps)	16.6%	19.2%	(257bps)
Adjusted EBITDA	9,108	9,193	(0.9%)	30,973	31,131	(0.5%)	38,617	43,141	(10.5%)	48,230	56,137	(14.1%)
Adjusted EBITDA margin	20.3%	20.4%	(6bps)	17.9%	18.0%	(6bps)	19.2%	21.2%	(201bps)	20.6%	23.1%	(249bps)
Guidance				30,000-32,000								
PF EPS	\$0.05	\$0.05	3.4%	\$0.15	\$0.15	0.7%	\$0.23	\$0.25	(7.8%)	\$0.28	\$0.33	(14.6%)
Free cash flow	7,506	9,648	(22.2%)	19,178	21,327	(10.1%)	20,791	23,658	(12.1%)	30,840	34,551	(10.7%)
FCF margin	16.7%	21.4%	(464bps)	11.1%	12.3%	(122bps)	10.3%	11.6%	(129bps)	13.2%	14.2%	(104bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 30: Five9 (FIVN)

We expect 4Q23 revenues of \$240.6mn

\$mn	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Revenues	240.6	238.1	1.0%	912.0	909.5	0.3%	1,060.7	1,055.8	0.5%	1,252.8	1,246.9	0.5%
Y/Y rev growth	15.5%	14.3%	120bps	17.1%	16.8%	32bps	16.3%	16.1%	22bps	18.1%	18.1%	(0bps)
Guidance	237.1-238.1			908.5-909.5								
EPS	\$0.49	\$0.49	1.1%	\$1.93	\$1.93	(0.1%)	\$2.33	\$2.17	7.6%	\$2.88	\$2.77	4.2%
Guidance	\$0.47-\$0.49			\$1.91-\$1.93								
FCF (CFO - capex - leases)	18.2	16.3	11.3%	84.2	82.2	2.5%	131.7	115.2	14.4%	200.5	170.7	17.5%
FCF margin	7.6%	6.9%	70bps	9.2%	9.0%	20bps	12.4%	10.9%	151bps	16.0%	13.7%	232bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 31: Freshworks (FRSH)

We expect 4Q23 revenues of \$158.5mn

\$mn	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	158.5	158.5	(0.0%)	594.8	594.8	0.0%	701.9	705.1	(0.5%)	828.2	843.9	(1.9%)
y/y change %	19.0%	19.0%	(1bps)	19.4%	19.4%	1bps	18.0%	18.5%	(55bps)	18.0%	19.7%	(170bps)
Guidance	156.7 - 159.3			587 - 595								
PF Operating income	7.2	7.8	(7.4%)	40.2	40.7	(1.3%)	78.5	68.2	15.1%	124.9	122.4	2.0%
PF operating margin	4.5%	4.9%	(36bps)	6.8%	6.8%	(9bps)	11.2%	9.7%	151bps	15.1%	14.5%	57bps
Guidance	5.5 - 8.5			24 - 32								
PF EPS	\$0.05	\$0.05	(7.8%)	\$0.22	\$0.23	(7.4%)	\$0.33	\$0.31	4.9%	\$0.47	\$0.44	5.0%
Guidance	\$0.05			\$0.18 - \$0.22								
Free cash flow	15.1	24.5	(62.6%)	65.1	73.8	(13.3%)	112.2	110.5	1.5%	154.9	158.3	(2.2%)
FCF margin	9.5%	15.5%	(596bps)	10.9%	12.4%	(146bps)	16.0%	15.7%	32bps	18.7%	18.8%	(5bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 32: Global-E (GLBE)

We expect 4Q23 revenues of \$182.0mn

	4Q23E			FY23E			FY24E			FY25E		
(000s)	BofA Estimate	Consensus	BofA vs consensus	BofA Estimate	Consensus	BofA vs consensus	BofA Estimate	Consensus	BofA vs consensus	BofA Estimate	Consensus	BofA vs consensus
Revenue build												
GMV	1,150,060	1,150,615	(0.0%)	3,518,037	3,518,592	(0.0%)	4,728,906	4,741,304	(0.3%)	6,347,400	6,366,354	(0.3%)
Y/Y change %	37.0%	37.1%	(7bps)	43.6%	43.6%	(2bps)	34.4%	34.8%	(33bps)	34.2%	34.3%	(5bps)
Guidance (mn)	1,125,000-1,175,000				3,493,000-3,543,000							
Total revenue	181,997	182,222	(0.1%)	566,542	566,753	(0.0%)	751,896	757,739	(0.8%)	1,015,584	1,031,575	(1.6%)
Y/Y change %	30.1%	30.3%	(16bps)	38.5%	38.6%	(5bps)	32.7%	33.7%	(98bps)	35.1%	36.1%	(107bps)
Guidance (mn)	178,000-186,000				563,000-571,000							
Adjusted EBITDA	33,980	34,512	(1.5%)	91,537	92,053	(0.6%)	127,964	132,165	(3.2%)	183,130	200,689	(8.7%)
Adjusted EBITDA margin	18.7%	18.9%	(27bps)	16.2%	16.2%	(9bps)	17.0%	17.4%	(42bps)	18.0%	19.5%	(142bps)
Guidance (mn)	31,500-36,500				89,100-94,100							
Free cash flow	87,715	68,769	27.6%	110,636	82,630	33.9%	156,149	141,945	10.0%	223,253	205,905	8.4%
Free cash flow margin	48.2%	37.7%	1046bps	19.5%	14.6%	495bps	20.8%	18.7%	203bps	22.0%	20.0%	202bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 33: CS Disco (LAW)

We expect 4Q23 revenues of \$35.1mn

	4Q23E			FY23E			FY24E			FY25E		
(in 000s)	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus
Total Revenue	35,149	34,989	0.5%	137,497	137,337	0.1%	148,854	151,848	(2.0%)	168,103	167,336	0.5%
Y/Y change %	8.0%	7.5%	49bps	1.7%	1.6%	12bps	8.3%	10.6%	(231bps)	12.9%	10.2%	273bps
Guidance	34,000-36,000			136,300-138,300								
Adjusted EBITDA	(6,081)	(5,622)	(8.2%)	(31,017)	(30,628)	(1.3%)	(4,618)	(11,996)	61.5%	6,909	2,297	200.7%
Adjusted EBITDA margin	(17.3%)	(16.1%)	(123bps)	(22.6%)	(22.3%)	(26bps)	(3.1%)	(7.9%)	480bps	4.1%	1.4%	274bps
Guidance	(7,000)-(5,000)			(31,900)-(29,900)								
EPS (Pro Forma)	(\$0.10)	(\$0.10)	(8.3%)	(\$0.48)	(\$0.47)	(2.9%)	(\$0.11)	(\$0.21)	82.6%	\$0.06	\$0.02	65.6%
Cash Flow from Operations	(4,915)	(5,177)	5.3%	(33,621)	(33,839)	0.6%	(13,031)	(15,895)	22.0%	1,482	(3,825)	358.2%
OCF margin	(14.0%)	(14.8%)	81bps	(24.5%)	(24.6%)	19bps	(8.8%)	(10.5%)	171bps	0.9%	(2.3%)	317bps
Free cash flow	(5,970)	(4,604)	(22.9%)	(38,292)	(38,271)	(0.1%)	(17,497)	(19,500)	11.4%	(3,561)	(2,724)	(23.5%)
FCF margin	(14.0%)	(13.2%)	(83bps)	(24.5%)	(27.9%)	341bps	(8.8%)	(12.8%)	409bps	0.9%	(1.6%)	251bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 34: Informatica (INFA)

We expect 4Q23 revenues of \$430.5mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Cloud subscription ARR	609,953	609,225	0.1%	609,953	609,225	0.1%	792,069	817,193	(3.1%)	1,004,686	1,062,256	(5.4%)
Y/Y change %	35.2%	35.0%	16bps	35.2%	35.0%	16bps	29.9%	34.1%	(428bps)	26.8%	30.0%	(315bps)
Guidance	604,000-614,000			604,000-614,000								
Self-managed subscription ARR	498,664	502,055	(0.7%)	498,664	502,055	(0.7%)	441,464	445,933	(1.0%)	390,825	378,495	3.3%
Y/Y change %	(8.2%)	(7.5%)	(62bps)	(8.2%)	(7.5%)	(62bps)	(11.5%)	(11.2%)	(29bps)	(11.5%)	(15.1%)	365bps
Subscription ARR	1,108,617	1,111,280	(0.2%)	1,108,617	1,111,280	(0.2%)	1,233,533	1,263,126	(2.3%)	1,395,510	1,440,751	(3.1%)
Y/Y change %	11.5%	11.8%	(27bps)	11.5%	11.8%	(27bps)	11.3%	13.7%	(240bps)	13.1%	14.1%	(93bps)
Guidance	1,098,000-1,118,000			1,098,000-1,118,000								
Maintenance ARR	491,217	491,393	(0.0%)	491,217	491,393	(0.0%)	453,083	451,932	0.3%	417,909	408,829	2.2%
Y/Y change %	(1.4%)	(6.0%)	460bps	(6.0%)	(6.0%)	(3bps)	(7.8%)	(8.0%)	27bps	(7.8%)	(9.5%)	177bps
Total ARR	1,599,834	1,602,946	(0.2%)	1,599,834	1,602,946	(0.2%)	1,686,615	1,715,058	(1.7%)	1,813,419	1,849,579	(2.0%)
Y/Y change %	5.5%	5.7%	(21bps)	5.5%	5.7%	(21bps)	5.4%	7.0%	(157bps)	7.5%	7.8%	(33bps)
Guidance				1,585,000-1,615,000								
Total revenue	430,461	432,473	(0.5%)	1,580,443	1,582,455	(0.1%)	1,626,920	1,683,190	(3.3%)	1,751,642	1,814,939	(3.5%)
Y/Y change %	7.9%	8.4%	(50bps)	5.0%	5.1%	(13bps)	2.9%	6.4%	(343bps)	7.7%	7.8%	(16bps)
Guidance	420,000-440,000			1,570,000-1,590,000								
Billings	614,773	584,203	5.2%	1,679,649	1,649,932	1.8%	1,794,981	1,768,402	1.5%	1,919,847	1,907,709	0.6%
Y/Y change %	10.6%	5.1%	550bps	7.5%	5.6%	190bps	6.9%	7.2%	(31bps)	7.0%	7.9%	(92bps)
PF Operating income	141,107	142,194	(0.8%)	439,923	442,330	(0.5%)	455,467	523,667	(13.0%)	495,050	583,527	(15.2%)
PF operating margin	32.8%	32.9%	(10bps)	27.8%	28.0%	(12bps)	28.0%	31.1%	(312bps)	28.3%	32.2%	(389bps)
Guidance	130,000-150,000			430,000-450,000								
Adjusted EBITDA	146,488	146,074.0	0.3%	457,978	460,216.5	(0.5%)	475,804	537,901.1	(11.5%)	516,946	605,369.0	(14.6%)
Adjusted EBITDA margin	34.0%	33.8%	25bps	29.0%	29.1%	(10bps)	29.2%	32.0%	(271bps)	29.5%	33.4%	(384bps)
PF EPS	\$0.29	\$0.30	(2.4%)	\$0.89	\$0.89	(0.7%)	\$0.90	\$1.07	(19.2%)	\$0.96	\$1.23	(27.4%)
Unlevered Non-GAAP FCF (Incl. Tax)	116,446		100.0%	415,829			445,939			499,192		
FCF margin	27.1%		2705bps	26.3%			27.4%			28.5%		
Guidance	114,000-134,000			410,000-430,000								

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 35: Intapp (INTA)

We expect 4Q23 revenues of \$103.0mn

	2Q24E			FY24E			FY25E			FY26E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
SaaS and support	75,456	75,635	(0.2%)	312,023	312,521	(0.2%)	378,884	375,343	0.9%	448,017	439,804	1.9%
Y/Y change %	22.5%	22.8%	(29bps)	23.7%	23.9%	(20bps)	21.4%	20.1%	133bps	18.2%	17.2%	107bps
Guidance	75,000-76,000			310,000-314,000								
Total recurring revenue	88,106	87,694	0.5%	363,325	363,298	0.0%	423,668	421,974	0.4%	489,044	481,816	1.5%
Y/Y change %	21.4%	20.8%	57bps	20.6%	20.6%	1bps	16.6%	16.2%	46bps	15.4%	14.2%	125bps
Total revenue	102,999	103,124	(0.1%)	424,512	424,998	(0.1%)	494,506	493,884	0.1%	570,509	564,211	1.1%
Y/Y change %	21.6%	20.5%	111bps	21.0%	19.9%	113bps	16.5%	17.8%	(128bps)	15.4%	20.3%	(491bps)
Guidance	102,500-103,500			422,500-426,500								
PF Operating income	5,387	5,590	(3.6%)	26,447	27,005	(2.1%)	39,565	39,057	1.3%	51,166	53,002	(3.5%)
PF operating margin	5.2%	5.4%	(19bps)	6.2%	6.4%	(12bps)	8.0%	7.9%	9bps	9.0%	9.4%	(43bps)
Guidance	5,000-6,000			24,500-28,500								
Adjusted EBITDA	6,292	7,709	(18.4%)	30,954	35,183	(12.0%)	46,073	49,269	(6.5%)	60,334	59,548	1.3%
Adjusted EBITDA margin	6.1%	7.5%	(137bps)	7.3%	8.3%	(99bps)	9.3%	10.0%	(66bps)	10.6%	10.6%	2bps
PF EPS	\$0.05	\$0.05	2.4%	\$0.27	\$0.27	(0.9%)	\$0.42	\$0.43	(0.7%)	\$0.55	\$0.53	3.8%
Guidance	\$0.04-\$0.06			\$0.25-\$0.29								
Free cash flow	9,700	12,758	(31.5%)	41,541	44,406	(6.9%)	60,004	61,545	(2.6%)	70,570	78,675	(11.5%)
FCF margin	9.4%	12.4%	(295bps)	9.8%	10.4%	(66bps)	12.1%	12.5%	(33bps)	12.4%	13.9%	(157bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH



Exhibit 36: Jamf (JAMF)

We expect 4Q23 revenues of \$148.5mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Revenue	148,543	148,454	0.1%	558,469	558,380	0.0%	631,070	640,463	(1.5%)	712,976	745,978	(4.4%)
Y/Y change %	14.0%	14.5%	(53bps)	16.6%	14.5%	214bps	13.0%	14.5%	(151bps)	13.0%	14.5%	(153bps)
Guidance	148,000-149,000			557,900-558,900								
PF Operating Income	20,053	20,033	0.1%	44,357	44,337	0.0%	70,540	66,633	5.9%	102,916	96,207	7.0%
PF Operating Margin	13.5%	13.5%	1bps	7.9%	7.9%	0bps	11.2%	10.4%	77bps	14.4%	12.9%	154bps
Guidance	19,500-20,500			43,800-44,800								
PF EPS	\$0.12	\$0.12	(1.5%)	\$0.29	\$0.30	(1.1%)	\$0.37	\$0.39	(6.3%)	\$0.52	\$0.55	(4.8%)
Free cash flow	25,531	35,921	(28.9%)	43,054	53,450	(19.4%)	65,562	96,812	(32.3%)	102,783	131,711	(22.0%)
FCF margin	17.2%	24.2%	(701bps)	7.7%	9.6%	(186bps)	10.4%	15.1%	(473bps)	14.4%	17.7%	(324bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 37: JFrog (FROG)

We expect 4Q23 revenues of \$93.0mn

	4Q23E			FY23E			FY24E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	92,965	93,081	(0.1%)	345,591	345,707	(0.0%)	428,838	422,162	1.6%
Y/Y change %	21.4%	21.6%	(15bps)	23.4%	23.4%	(4bps)	24.1%	22.1%	197bps
Guidance	92,500-93,500			345,100-346,100					
PF Operating income	10,437	10,464	(0.3%)	33,268	33,295	(0.1%)	44,889	50,725	(11.5%)
PF operating margin	11.2%	11.2%	(2bps)	9.6%	9.6%	(0bps)	10.5%	12.0%	(155bps)
Guidance	10,000-11,000			32,800-33,800					
Adjusted EBITDA	11,349	13,604	(16.6%)	36,805	47,947	(23.2%)	50,050	63,144	(20.7%)
Adjusted EBITDA margin	12.2%	14.6%	(241bps)	10.6%	13.9%	(322bps)	11.7%	15.0%	(329bps)
PF EPS	\$0.13	\$0.13	3.5%	\$0.45	\$0.44	1.2%	\$0.40	\$0.52	(30.7%)
Guidance	\$0.12-\$0.13			\$0.44-\$0.45					
Free cash flow	12,440	14,723	(18.4%)	52,638	54,921	(4.3%)	71,026	77,084	(8.5%)
FCF margin	13.4%	15.8%	(244bps)	15.2%	15.9%	(66bps)	16.6%	18.3%	(170bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 38: Lightspeed (LSPD)

We expect 4Q23 revenues of \$234.5mn

	3Q24E			FY24E			FY25E			FY26E		
	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus
Total Revenue	234,516	236,489	(0.8%)	904,522	906,653	(0.2%)	1,090,608	1,138,005	(4.2%)	1,311,232	1,417,101	(7.5%)
Y/Y change %	24.3%	25.3%	(105bps)	23.8%	24.1%	(29bps)	20.6%	25.5%	(494bps)	20.2%	24.5%	(430bps)
Guidance	232,000-237,000			890,000-905,000								
Adjusted EBITDA	2,397	2,339	2.5%	5,810	1,561	272.3%	37,724	44,412	(15.1%)	61,713	93,162	(33.8%)
Adjusted EBITDA margin	1.0%	1.0%	3bps	0.6%	0.2%	47bps	3.5%	3.9%	(44bps)	4.7%	6.6%	(187bps)
Guidance	Approx. 2,000			Breakeven or better								
Free cash flow	(15,526)	28,250	(282.0%)	(37,337)	(21,646)	(42.0%)	35,654	6,234	82.5%	56,107	226,165	(303.1%)
FCF margin	-6.6%	11.9%	(1857bps)	-4.1%	-2.4%	(174bps)	3.3%	0.5%	272bps	4.3%	16.0%	(1168bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 39: MeridianLink (MLNK)

We expect 4Q23 revenues of \$75.1mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	75,113	75,066	0.1%	304,151	304,104	0.0%	322,385	328,560	(1.9%)	344,963	361,198	(4.5%)
Y/Y change %	6.5%	6.4%	7bps	5.6%	5.6%	2bps	6.0%	8.0%	(205bps)	7.0%	9.9%	(293bps)
Guidance	73,000-77,000			302,000-306,000								
PF Operating income	710	1,432	(50.4%)	9,458	10,180	(7.1%)	29,746	25,645	16.0%	60,439	43,375	39.3%
PF operating margin	0.9%	1.9%	(96bps)	3.1%	3.3%	(24bps)	9.2%	7.8%	142bps	17.5%	12.0%	551bps
Adjusted EBITDA	24,057	24,865	(3.3%)	105,945	106,753	(0.8%)	120,014	120,520	(0.4%)	136,331	138,149	(1.3%)
Adjusted EBITDA margin	32.0%	33.1%	(110bps)	34.8%	35.1%	(27bps)	37.2%	36.7%	55bps	39.5%	38.2%	127bps
Guidance	22,000-26,000			104,000-108,000								
GAAP EPS	(\$0.08)	(\$0.07)	(14.0%)	(\$0.24)	(\$0.23)	(4.8%)	(\$0.09)	(\$0.07)	(28.2%)	\$0.19	\$0.13	47.7%
Free cash flow	12,359	13,755	(10.1%)	60,494	60,789	(0.5%)	79,360	78,195	1.5%	90,822	92,781	(2.1%)
FCF margin	16.5%	18.3%	(187bps)	19.9%	20.0%	(10bps)	24.6%	23.8%	82bps	26.3%	25.7%	64bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 40: NICE Ltd (NICE)

We expect 4Q23 revenues of \$620.9mn

\$mn	4Q23E			2023E			2024E			2025E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Non-GAAP Revenue	620.9	616.8	0.7%	2,375.2	2,371.1	0.2%	2,598.7	2,666.1	(2.5%)	2,898.4	2,967.8	(2.3%)
Y/Y rev growth	9.2%	8.5%	71bps	8.9%	8.7%	19bps	9.4%	12.4%	(303bps)	11.5%	11.3%	22bps
Guidance	2,359-2,379											
Free Cash Flow	138.7	133.6	3.8%	496.5	450.3	10.2%	612.8	567.7	7.9%	698.2	643.3	8.5%
FCF margin	22.3%	21.7%	67bps	20.9%	19.0%	191bps	23.6%	21.3%	229bps	24.1%	21.7%	241bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 41: Paycom Software (PAYC)

We expect 4Q23 revenues of \$422.9mn

\$Thousands	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	422,889	422,624	0.1%	1,681,968	1,681,703	0.0%	1,859,472	1,865,575	(0.3%)	2,092,694	2,108,425	(0.7%)
y/y change %	14.1%	14.0%	7bps	22.3%	22.3%	2bps	10.6%	10.9%	(38bps)	12.5%	13.0%	(48bps)
Guidance	420 - 425			1,679 - 1,684								
PF Operating income	127,450	137,809	(7.5%)	568,432	578,878.3	(1.8%)	627,318	629,285	(0.3%)	721,494	709,174	1.7%
PF operating margin	30.1%	32.6%	(247bps)	33.8%	34.4%	(63bps)	33.7%	33.7%	0bps	34.5%	33.6%	84bps
PF EPS	\$1.65	\$1.78	(7.8%)	\$7.48	\$7.62	(2.0%)	\$8.27	\$8.10	2.0%	\$9.47	\$9.18	3.1%
Guidance												
Free cash flow	84,082	80,399	4.4%	298,942	295,236	1.2%	348,880	344,245	1.3%	412,882	401,596	2.7%
FCF margin	19.9%	19.0%	86bps	17.8%	17.6%	22bps	18.8%	18.5%	31bps	19.7%	19.0%	68bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 42: PowerSchool (PWSC)

We expect 4Q23 revenues of \$183.5mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	Estimate	Consensus	BofA vs consensus
Total revenue	183,530	183,365	0.1%	699,045	698,880	0.0%	796,802	787,625	1.2%	869,541	870,979	(0.2%)
Y/Y change %	13.9%	13.8%	10bps	10.8%	10.8%	3bps	14.0%	12.7%	129bps	9.1%	10.6%	(145bps)
Guidance	182,000-185,000			697,500-700,500								
Income (Loss) from Operations	5,254	6,713	(21.7%)	26,243	27,702	(5.3%)	37,305	40,923	(8.8%)	66,856	72,085	(7.3%)
Operating Margin	2.9%	3.7%	(80bps)	3.8%	4.0%	(21bps)	4.7%	5.2%	(51bps)	7.7%	8.3%	(59bps)
Adjusted EBITDA	57,154	57,471	(0.6%)	229,725	230,042	(0.1%)	260,673	263,877	(1.2%)	297,615	301,667	(1.3%)
Adjusted EBITDA margin	31.1%	31.3%	(20bps)	32.9%	32.9%	(5bps)	32.7%	33.5%	(79bps)	34.2%	34.6%	(41bps)
Guidance	56,000-58,000			229,000-231,000								
Free cash flow	38,500	38,753	(0.7%)	135,072	137,492	(1.8%)	158,638	158,888	(0.2%)	186,747	198,567	(6.3%)
FCF margin	21.0%	21.1%	(16bps)	19.3%	19.7%	(35bps)	19.9%	20.2%	(26bps)	21.5%	22.8%	(132bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 43: RingCentral (RNG)

We expect 4Q23 revenues of \$571.3mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
\$mn												
Total revenues	571.3	570.7	0.1%	2,202.4	2,201.8	0.0%	2,417.1	2,407.2	0.4%	2,700.3	2,622.7	3.0%
Y/Y rev growth	8.9%	8.8%	11bps	10.8%	10.7%	3bps	9.7%	9.3%	42bps	11.7%	8.9%	277bps
Guidance	566.5-573.5			2,198-2,205								
Pro forma EPS	\$0.86	\$0.82	4.3%	\$3.23	\$3.19	1.1%	\$3.95	\$3.48	13.5%	\$4.71	\$4.03	17.1%
Guidance	\$0.82-\$0.83			\$3.19-\$3.20								
FCF	64.6	64.6	(0.0%)	294.6	289.1	1.9%	384.4	339.5	13.2%	566.8	436.8	29.8%
FCF margin	11.3%	11.3%	(1bps)	13.4%	13.1%	25bps	15.9%	14.1%	180bps	21.0%	16.7%	434bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 44: Twilio (TWLO)

We expect 4Q23 revenues of \$1,049mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
\$mn												
Total revenues	1,049.4	1,041.5	0.8%	4,127.4	4,119.5	0.2%	4,383.9	4,404.5	(0.5%)	4,818.6	4,924.6	(2.2%)
Y/Y rev growth	2.4%	1.7%	80bps	7.9%	7.7%	20bps	6.2%	6.9%	(70bps)	9.9%	11.8%	(190bps)
Guidance	1,030-1,040			NA								
Income/(Loss) from operations	133.8	126.3	5.9%	494.2	486.6	1.5%	573.2	576.5	(0.6%)	662.4	717.4	(7.7%)
PF operating margin	12.8%	12.1%	60bps	12.0%	11.8%	20bps	13.1%	13.1%	0bps	13.7%	14.6%	(80bps)
Guidance	115-125			475-485								
Proforma EPS	\$0.66	\$0.57	14.9%	\$2.25	\$2.18	3.2%	\$2.20	\$2.48	(11.3%)	\$2.53	\$3.07	(17.6%)
Guidance	\$0.53-\$0.57											
FCF	(10.1)	87.3	(111.5%)	142.6	241.3	(40.9%)	418.3	416.6	0.4%	585.3	568.7	2.9%
FCF margin	(1.0%)	8.4%	(930bps)	3.5%	5.9%	(240bps)	9.5%	9.5%	10bps	12.1%	11.5%	60bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 45: Unity Software (U)

We expect 4Q23 revenues of \$553.4mn

	4Q23E			2023E			2024E			2025E		
\$mn	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenues	553.4	551.5	0.3%	2,131.4	2,129.4	0.1%	2,430.7	2,331.6	4.3%	3,002.2	2,707.4	10.9%
Y/Y rev growth	22.7%	22.3%	42bps	53.2%	53.1%	14bps	14.0%	9.5%	455bps	23.5%	16.1%	739bps
Y/Y rev growth (normalized)	6.8%			5.7%			14.0%			23.5%		
Adj EBITDA	119.7	113.7	5.3%	381.9	377.0	1.3%	726.5	633.0	14.8%	1,025.2	838.4	22.3%
Adjusted EBITDA margin	21.6%	20.6%	102bps	17.9%	17.7%	21bps	29.9%	27.2%	274bps	34.1%	31.0%	318bps
FCF	179.0	83.0	115.6%	297.1	217.4	36.6%	631.2	572.7	10.2%	1,022.0	744.1	37.4%
FCF margin	32.3%	15.1%	1730bps	13.9%	10.2%	373bps	26.0%	24.6%	140bps	34.0%	27.5%	656bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 46: Weave Communications (WEAV)

We expect 4Q23 revenues of \$44.2mn

	4Q23E			FY23E			FY24E			FY25E		
\$mn	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Revenue	44.2	44.3	(0.1%)	169.0	169.0	(0.0%)	192.9	195.0	(1.1%)	220.1	225.4	(2.3%)
Y/Y rev growth	17.3%	17.5%	(16bps)	18.9%	18.9%	(4bps)	14.1%	15.3%	(120bps)	14.1%	15.6%	(147bps)
Guidance	43.5-44.5			168.3-169.3								
Income (Loss) from Operations	(2.5)	(2.2)	(13.1%)	(12.3)	(12.0)	(2.4%)	(5.0)	(5.3)	6.2%	6.4	3.2	98.7%
PF operating margin	(5.7%)	(5.0%)	(67bps)	(7.3%)	(7.1%)	(17bps)	(2.6%)	(2.7%)	14bps	2.9%	1.4%	148bps
Guidance	(3)-(2)			(12.8)-(11.8)								
Free cash flow	1.3	1.3	(0.2%)	4.9	4.9	(0.1%)	16.7	13.3	25.7%	29.8	22.6	31.9%
FCF margin	3.0%	3.0%	(0bps)	2.9%	2.9%	(0bps)	8.6%	6.8%	184bps	13.6%	10.0%	352bps

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 47: Vertex, Inc (VERX)

We expect 4Q23 revenues of \$146.0mn

	4Q23E			FY23E			FY24E			FY25E		
\$000s	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	145,955	146,412	(0.3%)	563,428	563,885	(0.1%)	631,678	638,173	(1.0%)	710,067	722,657	(1.7%)
y/y change %	11.3%	11.7%	(35bps)	14.6%	14.7%	(9bps)	12.1%	13.2%	(106bps)	12.4%	13.2%	(83bps)
Guidance	141,000-143,000			562,500-564,500								
PF Operating income	24,101	24,104	(0.0%)	81,509	81,481	0.0%	112,928	108,241	4.3%	136,289	142,378	(4.3%)
PF operating margin	16.5%	16.5%	5bps	14.5%	14.4%	2bps	17.9%	17.0%	92bps	19.2%	19.7%	(51bps)
Adjusted EBITDA	28,597	28,688	(0.3%)	97,316	94,010	3.5%	134,714	126,276	6.7%	173,852	161,272	7.8%
Adjusted EBITDA margin	19.6%	19.6%	(0bps)	17.3%	16.7%	60bps	21.3%	19.8%	154bps	24.5%	22.3%	217bps
Guidance	24,000-26,000			96,300-98,300								
PF EPS	\$0.11	\$0.11	(6.0%)	\$0.38	\$0.38	0.4%	\$0.54	\$0.51	6.5%	\$0.63	\$0.66	(4.6%)
Free cash flow	47,827	43,371	9.3%	25,083	20,222	19.4%	46,466	67,764	(45.8%)	71,941	104,896	(45.8%)
FCF margin	32.8%	29.6%	315bps	4.5%	3.6%	87bps	7.4%	10.6%	(326bps)	10.1%	14.5%	(438bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 48: Zeta Global (ZETA)

We expect 4Q23 revenues of \$207.1mn

	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total Revenue	207,090	207,577	(0.2%)	725,493	726,016	(0.1%)	840,175	852,716	(1.5%)	955,461	998,670	(4.3%)
Y/Y change %	18.6%	18.5%	8bps	23.1%	22.9%	23bps	16.0%	17.5%	(149bps)	13.8%	17.1%	(330bps)
Guidance	205,000-209,000			723,000-727,000								
Adjusted EBITDA	41,936	42,010	(0.2%)	126,558	126,632	(0.1%)	155,810	158,872	(1.9%)	186,737	201,321	(7.2%)
Adjusted EBITDA margin	20.3%	20.2%	1bps	17.4%	17.4%	0bps	18.5%	18.6%	(9bps)	19.5%	20.2%	(61bps)
Guidance	41,700-42,200			126,300-126,800								
PF EPS	\$0.11	\$0.12	(13.3%)	\$0.26	\$0.27	(6.2%)	\$0.41	\$0.42	(3.3%)	\$0.53	\$0.57	(7.1%)
Free cash flow	27,749	19,677	41.0%	63,694	55,947	13.8%	81,710	88,853	(8.0%)	102,531	120,967	(15.2%)
FCF margin	13.4%	9.5%	392bps	8.8%	7.7%	107bps	9.7%	10.4%	(69bps)	10.7%	12.1%	(138bps)

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 49: ZoomInfo (ZI)

We expect 4Q23 revenues of \$310.5mn

\$mn	4Q23E			FY23E			FY24E			FY25E		
	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus	BofA Est.	Consensus	BofA vs consensus
Total revenue	310.5	310.7	(0.1%)	1,233.8	1,233.8	(0.0%)	1,253.3	1,274.0	(1.6%)	1,332.9	1,415.7	(5.8%)
y/y change %	2.9%	3.0%	(10bps)	12.1%	12.4%	(21bps)	1.6%	3.3%	(168bps)	6.4%	11.1%	(477bps)
Guidance	309-312			1,232-1,235								
PF Operating income	122.9	123.2	(0.2%)	494.9	495.3	(0.1%)	503.9	510.8	(1.4%)	536.8	576.7	(6.9%)
PF operating margin	39.6%	39.6%	(4bps)	40.1%	40.1%	(3bps)	40.2%	40.1%	11bps	40.3%	40.7%	(47bps)
PF EPS	\$0.24	\$0.25	(1.8%)	\$0.99	\$1.00	(0.6%)	\$0.97	\$0.99	(1.4%)	\$1.04	\$1.11	(6.9%)
Guidance	\$0.24-\$0.25			\$0.99-1.00								
Free cash flow	105.3	108.3	(2.9%)	393.7	394.2	(0.1%)	399.7	433.1	(8.3%)	428.6	509.1	(18.8%)
FCF margin	33.9%	34.9%	(96bps)	31.9%	31.9%	(4bps)	31.9%	34.0%	(210bps)	32.2%	36.0%	(381bps)
Unlevered Free Cash Flow	111.8	120.7	(8.0%)	449.1	452.6	(0.8%)	459.7	476.0	(3.5%)	488.6	548.4	(12.2%)
uFCF margin	36.0%	38.8%	(285bps)	36.4%	36.7%	(28bps)	36.7%	37.4%	(68bps)	36.7%	38.7%	(208bps)
Guidance	450.0											

Source: BofA Global Research, VisibleAlpha

BofA GLOBAL RESEARCH

Exhibit 50: Companies mentioned

Companies mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ALRM	ALRM US	Alarm	US\$ 61.57	B-1-9
AMPL	AMPL US	Amplitude, Inc.	US\$ 13.21	C-1-9
AVDX	AVDX US	AvidXchange, Inc.	US\$ 11.28	C-3-9
BSY	BSY US	Bentley Systems	US\$ 50.62	B-2-7
BIGC	BIGC US	Bigcommerce	US\$ 7.98	C-2-9
BILL	BILL US	BILL	US\$ 75.97	C-1-9
BLKB	BLKB US	Blackbaud, Inc.	US\$ 79.22	B-3-7
BL	BL US	BlackLine, Inc.	US\$ 58.41	C-3-9
AI	AI US	C3.ai	US\$ 24.12	C-3-9
CCCS	CCCS US	CCC Intelligent Sol	US\$ 10.87	B-1-9
CFLT	CFLT US	Confluent	US\$ 23.75	C-3-9
LAW	LAW US	Disco	US\$ 8.39	C-3-9
DOCU	DOCU US	DocuSign	US\$ 53.21	C-2-9
DBX	DBX US	Dropbox	US\$ 32.49	B-1-9
DT	DT US	Dynatrace	US\$ 60.03	C-1-9
ENFN	ENFN US	Enfusion, Inc.	US\$ 7.83	C-3-9
FIVN	FIVN US	Five9	US\$ 73.48	C-3-9
FRSH	FRSH US	Freshworks	US\$ 21.66	C-2-9
GLBE	GLBE US	Global-e Online Ltd.	US\$ 38.91	C-1-9
INFA	INFA US	Informatica Inc.	US\$ 30.25	B-1-9
INTA	INTA US	Intapp Inc.	US\$ 44.82	C-1-9
JAMF	JAMF US	Jamf	US\$ 18.63	C-2-9
FROG	FROG US	JFrog	US\$ 35.79	C-1-9
LSPD	LSPD US	Lightspeed	US\$ 19.06	C-2-9
YLSPD	LSPD CN	Lightspeed	C\$ 25.78	C-2-9
MLNK	MLNK US	MeridianLink	US\$ 22.23	B-1-9
NCNO	NCNO US	nCino	US\$ 30.62	C-1-9
NCSYF	NICE IT	NICE Ltd.	ILS 782	C-1-9
NICE	NICE US	NICE Ltd.	US\$ 211.36	B-1-9
PAYC	PAYC US	Paycom	US\$ 194.23	C-2-7
PWSC	PWSC US	PowerSchool	US\$ 24.72	C-1-9
RNG	RNG US	RingCentral	US\$ 33.14	C-1-9
TWLO	TWLO US	Twilio	US\$ 69.14	C-3-9
U	U US	Unity	US\$ 31.46	C-1-9
VERX	VERX US	Vertex	US\$ 25.28	C-3-9
WEAV	WEAV US	Weave	US\$ 13.13	C-1-9
ZETA	ZETA US	Zeta Global	US\$ 9.64	C-1-9
ZI	ZI US	ZoomInfo	US\$ 15.38	C-1-9

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk**Alarm.com (ALRM)**

Our PO of \$75 is based on a 4.3x EV/24e revenue multiple (0.9x on an EV/24e Rev/Growth basis), a discount on EV/Rev, but a premium on EV/Rev/Growth versus <20% growth software peers, on average, at 5.1x EV/24e revenue (0.4x EV/Rev/G). We think a premium EV/Rev/Growth multiple is warranted by revenue visibility, positive secular forces and profitability.

Downside risks to our price objective are SaaS multiple compression, lower growth during housing market growth, continued COVID impact, greater than expected headwind from Vivint licensing legal dispute, internet company competition, ADT shifting away from Alarm.com, hardware supply, high customer concentration, change in economics with Vivint, Vivint's lawsuit against Alarm.com, ability to expand the business internationally, ability to grow beyond professionally-monitored security, fierce competition in the smart home market and dependency on security dealers

Amplitude, Inc. (AMPL)

Our \$14 PO is based on 6.0x EV/C24E revenue, representing a growth adjusted multiple of 0.8x our 7% 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 0.4x (6.4x 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.

AvidXchange, Inc. (AVDX)

Our PO of \$10 is based on an EV/rev multiple of 3.7x our C25 revenue estimate, which represents an EV/rev/growth multiple of 0.2x our C25e revenue growth of 16% y/y, in line with the small cap group, trading at 0.2x.

Risks to our PO are as follows: 1) AvidXchange operates in a highly cyclical business given exposure to small and mid-sized businesses, 2) AvidXchange needs to drive awareness of the new AP automation software category as it currently competes with manual check writing and legacy ERP providers, and 3) AvidXchange competes with established platform vendors and point solutions.

Bentley Systems (BSY)

Our PO of \$57 is based on an EV/FCF multiple of 46x our C24 free cash flow estimate, a premium to the SaaS group (40x), which we believe is warranted given strong secular growth drivers and defensive exposure, as well as its high visibility revenue and attractive margin profile.

Downside risks: 1) Premium valuation presents risk of pullback in the event of changes to market sentiment stemming from global macro uncertainty, or potentially disappointing quarterly revenue, 2) prolonged COVID headwinds resulting in slower economic activity and decreased company budgets, 3) ability to drive upsell and cross sell through the installed base, 4) increased competition from Autodesk and vertical-specific vendors resulting in elevated churn, 5) execution issues within growth initiatives such as China and Digital Twins.

BigCommerce Holdings, Inc. (BIGC)

Our \$11 PO is based on 2.7x EV/C24E revenue or 0.3x EV/R/G. The multiple we use to calculate our PO is a discount to its horizontal SaaS peers at 6.6x (0.5x EV/R/G), which we believe is warranted given BigCommerce is disrupting a large, growing, and attractive digital commerce TAM, balanced against execution risks on its recent pivot to focus primarily on the upmarket.

Risks to our PO are: 1) competition, 2) pandemic driven supply chain bottlenecks, 3) tough pandemic comps, 4) cyclical spending pressures, 5) SMB exposure, and 6) execution risk.

BILL (BILL)

Our PO of \$90 is based on an EV/revenue multiple of 6.3x our CY25 revenue estimate. This represents an EV/Rev/Growth multiple of 0.3x based on our C25e core revenue growth rate of 23%, discount to the mid cap peer group trading at 0.4x for macro and SMB exposure.

Downside risks are: 1) Higher degree of cyclical exposure, given the focus on SMB and variable transaction and float revenue, which, in a recessionary environment, could see declined transaction volume and lower interest rates, 2) Premium valuation presents risk of pullback in the event of changes to market sentiment stemming from global macro

uncertainty, or potentially disappointing quarterly revenue, 3) Need to drive brand/product awareness to drive growth - there is relatively low awareness of the BILL brand and BILL is most often competing with status quo (manual/human efforts). Execution on demand generation, with both customers and partners, is critical for BILL to continue growing at its recent growth trend (revenue growth of 67% in FY19).

Blackbaud, Inc. (BLKB)

Our \$70 PO represents 3.8x EV/C24E based on our revenue estimate, representing a growth adjusted multiple of 0.63x our 6% growth rate. The multiple we use is a discount to the small cap SaaS peer group at 4.3x for slower growth outlook.

Downside risks to our price objective are: 1) relatively low nonprofit IT spending growth, 2) risk that acquisitions do not generate long term margin expansion from potentially lacking execution on cross selling or cost saving initiatives and 3) exposure to applications spending, which is discretionary and highly cyclical.

Upside risks are: 1) accelerating revenue growth from sales productivity selling broader suite of products, 2) better than expected development and sales productivity as the company gains traction selling an integrated product offering and 3) multiple expansion from improving macroeconomic environment and rotation into small/mid cap growth stocks.

BlackLine, Inc. (BL)

Our \$52 PO is 5.1x EV/C24E revenue, representing a growth adjusted multiple of 0.47x our 11% growth rate. The multiple we use is discount to the horizontal SaaS group average (6.0x EV/CY24E revs), warranted for decelerating billings growth and compressing NRR trends, balanced against its category leadership in accounting automation.

Risks to our PO are: 1) Pace of enterprise finance department digital transformations accelerates, 2) competition decreases, 3) better than expected margin expansion, 4) net revenue retention expands faster than expected, and 5) adoption of SaaS Financials platforms slow, increasing the need for multi-ERP visibility tools.

C3.ai (AI)

Our PO of \$18 is based on an EV/rev multiple of 3.8x our C25E revenue. On a growth-adjusted basis, this is 0.3x our +15% y/y C24E growth rate. Our 0.3x multiple is in line with the small cap peer group trading at 0.3x. We carry an underperform rating for 1) a more pronounced impact from macro uncertainty on the business, 2) continued lack of visibility in the business model given the lumpiness/low customer count, and 3) near-term uncertainty associated with sales execution challenges.

Risks to our price objective are: 1) Premium valuation presents risk of pullback in the event of changes to market sentiment stemming from global macro uncertainty, or potentially disappointing quarterly revenue, 2) Larger deal sizes create lumpy quarterly revenue growth which can present challenges to forecasting quarterly backlog (or remaining performance obligation), total contract value (TCV), and revenue, and 3) Enterprise application spending has proven to be highly cyclical, given the more discretionary nature of applications projects which could present a higher degree of risk for a bookings deceleration for C3.ai and other application vendors, in the event of an economic slowdown.

CCC Intelligent Solutions (CCCS)

Our \$14 PO is based on an EV/revenue multiple of 9.5x our CY24e revenue estimate. The 9.5x multiple represents an EV/revenue/growth multiple of 1.1x, which is above the less than 10% growth and vertical software peers at 0.5x and 0.6x, respectively. We attribute the premium to CCCS' level of profitability, high visibility revenue stream, less

dependence on new customer acquisition for growth and expected post-COVID tailwind. Relative to insuretech, we believe CCC's margin profile, FCF generation and depth of proprietary data support a premium valuation. The same holds true relative to <10% growers where there is a wide range of profitability, competitive forces and differentiation. Within the vertical SaaS group we find a strong correlation between EBITDA margin, FCF and valuation.

Downside risk to our PO include increased competition leading to higher churn, increased pricing pressure from a highly fragmented market, increased sales lead time reducing new customer acquisition, continued chip shortage could result in fewer new vehicle sales and lead to fewer insured vehicles on the road and economic conditions and gasoline prices may impact number of miles driven which is correlated with number of accidents.

Confluent (CFLT)

Our PO of \$24 is based on an EV/Revenue multiple of 5.5x our C25 revenue estimate. The 5.5x multiple represents an EV/Revenue/Growth multiple of 0.2x based on our C25e revenue growth rate of 26%, at a discount to the midcap group trading at 0.3x C25e growth averaging 17% for lower margin profile.

Downside risks: 1) Confluent shares trade at a premium to the software group on an EV/revenue basis. This premium presents the risk of a pullback, which could occur in the event of changes to market sentiment stemming from global macro uncertainty or potentially disappointing quarterly revenue growth. 2) It has high exposure to cyclical trends of application software spend. Enterprise application software has proven to be highly cyclical, during an economic slowdown when firms are faced with shrinking IT budgets, application upgrades, migrations, or new installations are often deferred, which could present a high degree of risk for bookings deceleration. 3) Confluent competes in a market with deep pocketed vendors, such as the top three cloud hyperscaler (AWS, Azure, and GCP), which may decide to invest more aggressively against the emerging data-in-motion/event stream processing opportunity.

Upside risks: 1) Confluent Cloud operates in a consumption model (versus typical SaaS subscription). In the event of changes to market sentiment on macro abating and IT spend returning to normal, consumption and revenue growth could quickly reaccelerate which could drive multiple expansion

CS Disco, Inc. (LAW)

The \$6 PO is based on 1.6x our C24E revenue for good quarterly execution and better-than-expected expanding EBITDA margins. Our multiple represents an EV/revs/growth multiple of 0.2x, a discount to horizontal peers at 6.1x and 0.4x, warranted given higher execution risks and an unpredictable revenue stream.

Risks to our PO are 1) revenue growth is much better and more predictable than expected, 2) a visible path to profitability is much faster than expected, 3) Disco becomes the industry standard, lowering competitive threats, 4) execution is much better than expected, 5) demand and spend for legal-tech proves very resilient in a recessionary/inflationary environment.

DocuSign (DOCU)

Our PO of \$68 is based on an EV/FCF multiple of 15x our CY25 FCF estimate. This multiple represents a discount to mid cap peers at an average of 30x. We view a discount as warranted for DocuSign given a slower revenue and FCF growth profile.

Downside risks to our PO are 1) increased competition from Adobe, 2) slower-than-expected adoption of eSignature in key end markets, 3) declines in sales productivity ratio as measured by S&M spend divided by incremental subscription revenue.

Dropbox (DBX)

Our \$34 PO is based on a weighted bull/base/bear case DCF analysis assigned 25%/50%/25% weights respectively. Our \$34 PO represents a 2024E P/FCF multiple of 12.2x, compared to the less than 10% software growers peer group average of 25.3x. We believe the 12.2x multiple is justified given DBX's revenue visibility and favorable margin profile, but acknowledge a discount to the low growth software group is warranted given DBX's limited growth levers and intensifying competitive environment.

Downside risks to our PO: 1) increased competition leading to greater than expected pricing pressure 2) greater than expected user churn, and 3) slower than expected paying user growth.

Dynatrace (DT)

Our \$70 PO is based on 57.4x EV/C24E FCF, a premium to infrastructure software peers at 43.7x, which we think is warranted given our strong revenue forecast and good execution in F2Q24.

For comparison purposes, our \$70 PO implies 12.6x EV/C24E revenue compared to its infrastructure peers at 7.9x.

Downside risks: macroeconomic downturn, increase in competition, ability to hire direct sales reps at a healthy clip, ability to expand into adjacent markets, and ability to sustain high R&D innovation.

Enfusion, Inc. (ENFN)

Our \$8 PO is based on a 4.9x EV/C24E revenue multiple, representing a growth adjusted multiple of 0.3x (i.e., EV/R/G) which is lower than its vertical software peers at 0.5x (or 7.1x EV/revenue). We believe a discount EV/R/G multiple is warranted given Enfusion's relatively good growth profile balanced against execution risks given sensitivity to market volatility.

Upside risks to our PO: 1) revenue growth proves accelerates above 20%+, 2) customer retention proves healthy, 3) ability to drive strong new customer acquisition in a tough macro environment, 4) big new logo and conversion deals, and 5) company delivers a Rule of 40 (revenue growth + adjusted EBITDA profile) over the medium-term.

Downside risks to our PO: 1) revenue growth proves decelerates and stays below 10%, 2) customer churn increases, 3) new customer acquisition proves difficult in an improving macro environment, and 4) company struggles to get back a rule of 25 profile (revenue growth + adjusted EBITDA) over the medium-term.

Five9 (FIVN)

Our PO of \$61 is based on a CY24e EV/Sales multiple of 4.3x, a discount with 20-30% growth software group. We believe this is justified based on our view that contact center as a service (CCaaS) is an attractive market with mid-20% projected annual growth and Five9's leading solution. However, with competitive intensity increasing, we see risk to long term revenue growth projections limiting near term multiple expansion.

Downside risks to our PO are any slowdown in the enterprise sales ramp and productivity, failure to execute new large deals, slower than expected EBITDA and FCF margin expansion, and heightened competition in the contact center market. Upside risks are improving success upmarket with larger enterprises, partnerships with or acquisition by larger platform vendors, better than expected contact center demand.

Freshworks, Inc. (FRSH)

Our PO of \$23 is based on an EV/Rev multiple of 9.0x our C24E revenue, a premium to the mid-cap software group, trading at 5.8x for faster growth and stronger margin/FCF progression.

Risks to our PO: 1) Freshworks shares trade at a premium to the software group, presenting the risk of a pullback in the event of changes to market sentiment stemming from global macro uncertainty or potentially disappointing quarterly revenue, 2) relatively high churn could challenge profitability as small and mid-sized businesses have higher attrition, and 3) Freshworks competes in highly competitive markets, which includes large and established vendors.

Global-e Online Ltd. (GLBE)

Our \$48 PO is based on a 27.1x EV/gross profit applied to our C24E GAAP gross profit. The 27.1x multiple translates to an EV/gross profit/growth adjusted multiple of 0.8x, a premium to peers at 0.6x, which we believe is warranted given Global-e's potential to display 35%+ GMV and revenue growth trends in 2023, and the potential for sustained upward estimate revisions. On an EV/revenue basis, the \$48 PO implies 11x C23E revs, or 0.3x EV/R/G, compared to peers at 6.5x/0.5x.

Risks to our PO: 1) transactional revenue model tied to GMV, 2) tough comps out of the pandemic, 3) pandemic driven supply chain bottlenecks, 4) failure to renew Shopify partnership, 5) competition, 6) regulatory risk, and 7) customer concentration risk.

Informatica Inc. (INFA)

Our \$33 PO is based on a SOTP valuation analysis. On a consolidated basis, the SOTP implies a 6.8x EV/C24E revenue multiple. For our SOTP, we use a 9.8x EV/C24E subscription revenue multiple, that translates to an EV/R/G of 0.65x, a premium to infrastructure peers at 7.3x/0.6x, warranted for 35%+ growth vs. 16% peers. We use a 2.0x EV/C23E multiple for the rest of the revenue, as its legacy maintenance revenue stream is not a strategic growth vector. This compares to 5.5x for legacy software peers.

Risks to our PO are: 1) competition, 2) transition takes time, 3) execution, 4) shifts in cloud and self-managed could affect recognized revenue, 5) pricing changes that elevate churn, and 6) macro related risks.

Intapp Inc. (INTA)

Our \$50 PO is based on our SOTP (sum of the parts) valuation analysis: 9.8x EV/C24E SaaS revenues, above vertical software peers at 7.0x for faster cloud growth (35%+ vs mid-teens peers). The rest of revenues is at a 6.0x multiple, comparable to legacy on-premise vertical peers at 6x, given on-premise is not a focus vector. Our PO implies a 8.3x EV/C24E consolidated revenue multiple.

Downside risks to our PO are: 1) TAM penetration, 2) execution, 3) competition, 4) not currently profitable, and 5) enterprise application spending is highly cyclical.

Jamf (JAMF)

\$22 PO is based on an EV/sales multiple of 5.0x our C24E revenue estimate, representing a premium to the small cap SaaS group at 4.6x, given our expectations for Jamf to sustain high-teens percent or higher recurring revenue growth over the next two to three years (versus the small cap SaaS group expected to grow in the low double-digits) driven by ongoing share gains in the \$18 billion estimated addressable market for Apple device management software.

Downside risks are: 1) Systems management market is more mature relative to other software markets with a somewhat lacking innovation cycle driving growth, which could cap growth in the near/long term, 2) Need to drive awareness of Jamf brand to continue

driving replacement deals in order to sustain growth which could be challenging given larger priorities are underway (cloud IaaS, cloud apps, digital transformation, etc.), and 3) Highly competitive market in device management, with offerings from platform vendors that sell broader suites that can manage multiple devices/infrastructure - the absence of ongoing feature enhancements for product differentiation could present the risk of slowing share gains or even share losses to platform vendors, which could curb growth.

JFrog Ltd (FROG)

Our \$36 PO is based on 7.9x EV/C24E revenue or an EV/R/G of 0.3x, which compares to its infrastructure peers at 0.4x EV/R/G (6.4x revenue), warranted given a similar growth profile vs the peer average (i.e., low-20s vs mid teens), but compressing NRR.

Downside risks to our PO include: macroeconomic downturn, prolonged COVID headwinds, increase in competition, ability to upsell installed base, ability to convert free users to paid subscriptions, ability to expand into adjacent markets, and ability to sustain high R&D innovation.

Lightspeed Commerce Inc. (LSPD / YLSPD)

Our \$20 USD PO / \$26 CAD PO is based on 5.0x EV/C24E gross profit, or an EV/GP/G of 0.24x, which is a discount to its horizontal software peers at 7.6x/0.5x. We believe a discount multiple is warranted given the risks the company is facing due to recessionary pressure, inflationary pressure, and/ waning consumer demand, along with competition risk, and execution risk around its One Lightspeed strategy.

Risks to an investment in LSPD are 1) macro-sensitivity of the company's customer-base, 2) competition, 3) execution risk while integrating acquisitions, 4) payments adoption, and 5) path to profitability.

MeridianLink, Inc. (MLNK)

The \$25 PO is based on 20x EV/C24E EBITDA, lower than its Rule-of-40+ vertical peers of 31x, given one of its end markets, mortgage originations, is under pressure due to the current high interest rate environment.

Risks to our PO are: 1) transactional model tied to loan volumes, 2) rising interest rates affecting refinancings, 3) consumer sentiment decreases, 4) pricing pressures from competitors, and 5) relatively high debt leverage ratio.

nCino, Inc. (NCNO)

Our PO of \$34 is based on an EV/sales multiple of 7.0x our C24E revenue estimate (0.4x growth adjusted), in line with the SMID cap software group trading at 0.4x C24E. We believe nCino will drive ongoing share gains in the \$18 billion addressable market for financial applications.

Downside risks are 1) instability in nCino's end market, 2) inability to achieve long term targets profitability - the company targets a future long term (4 to 6 years) operating margin of approximately 35% and, 3) enterprise application spending has proven to be highly cyclical - in the event of an economic slowdown, nCino could see deferred projects which could present a higher degree of risk for a bookings deceleration.

NICE Ltd. (NICE / NCSYF)

Our PO of US\$285 / ILS 1034 is based on a 6.9x multiple of our C24e EV/Revenue. Our target multiple is a premium to the UCaaS peer group trading at 2.7x, which we believe is justified based on competitive positioning, market share gains, margin and FCF generation. As Cloud increases as a percentage of total revenue, this should be supportive for the multiple.

Upside risks to our PO are 1) higher-than-expected cloud revenue growth, 2) higher-than-expected Contact Center market growth, and 3) a faster displacement of legacy on-premise solutions.

Downside risks to our PO are 1) investor sentiment and sensitivity to the premium valuation levels, 2) lower-than-expected cloud revenue growth, 3) slower-than-expected displacement of legacy on-premise solutions, 4) cash flow deterioration.

Paycom (PAYC)

Our \$210 PO is based on 34x EV/C24E FCF. The 34x EV/C24E FCF multiple is a slight discount to payroll and HR peers which include Workday and Paylocity at 37x EV/C24E FCF to account for recent execution issues and uncertainty surrounding what a sustainable long term growth trajectory looks like.

Downside risks to our PO are: 1) multiple compression in the event of disappointing quarterly results, 2) meaningful SMB exposure, which is a market segment more prone to churn given it has a higher rate of business closures and/or failures, and 3) interest rate sensitivity.

PowerSchool Holdings, Inc. (PWSC)

Our \$30 PO is based on 25.3x EV/C24E EBITDA, applied to our \$260mn estimate. The 25.3x multiple we use is a discount to its vertical software peers that are currently trading at a 28.0x average, warranted for slower revenue growth (10% organic vs. 11%), balanced against less end-market demand risk and PowerSchool's category leadership in its target K-12 end-market.

Risks to our PO are: 1) M&A risk, increasing acquisition/integration/execution risks in the future, 2) high penetration rates, 3) school and district budget constraints, 4) international expansion could take time, 5) new regulations negatively affecting sales/adoption cycles, 6) increasing competition, and 7) ed-tech software spending can be cyclical

RingCentral (RNG)

Our \$55 PO is based on 2.8x CY24e EV/revs. Our target multiple is a premium to the communication peer group at 2.5x but in line on EV/Rev/Growth. We believe that a premium is also supported by RNG's margin upside, positive FCF, and market share gains. The company has the largest scale among cloud-based pure-play vendors and the potential for market disruption.

Downside risks to our PO are 1) benefits of the Avaya and other partnerships taking longer than expected, 2) changes in strategic direction, 3) failure to scale upmarket, 4) higher-than-anticipated customer support and acquisition costs as the company scales up market, 5) macro economy negatively affecting the company's SMB-centric customer base, and 6) competition including Microsoft and Zoom Phone.

Twilio (TWLO)

Our \$55 PO is based on 1.7x EV/C24eRev (EV/Rev/G multiple of 0.3x). Our multiple is a discount to the communication software comp group trading at 2.5x. We believe a discount is justified based on TWLO's lower expected usage, potential margin pressure, and intensifying competition.

Upside risks to our PO are 1) faster-than-expected reacceleration of organic revenue growth, 2) macro recovery driving better-than-expected usage rates, and 3) higher-than-expected revenue mix of software versus core messaging, voice and email.

Downside risks to our PO are 1) increased competition from larger platform vendors, 2) possible price pressure, 3) deterioration in the macro economy, 4) decrease in ability to

monetize the platform via developers, 5) deterioration in gross margins, 6) missteps causing growth to dip below management's targets, 7) major network and product issues.

Unity (U)

Our \$55 PO is based on a 11.1x 2024E EV/Revenue multiple (0.8x growth adjusted). Our growth adjusted multiple is a discount to the design software peer group. We believe a discount multiple is warranted based on lower revenue visibility and profitability, partially offset by Unity's entrenched competitive position and various levers for growth.

Downside risks to our PO are slower than expected recovery in Unity's monetization tool, increased competition, greater than expected churn rate, and greater than expected pull back in ad spend and mobile gaming usage.

Vertex, Inc. (VERX)

Our PO of \$23 is based on an EV/sales multiple of 5.7x our C25 revenue estimate, representing a growth adjusted multiple of 0.5x, a slight premium to small cap software peer group at 0.3x EV/sales/growth, given our expectations for mid teens percentage subscription revenue growth over the longer term and limited margin expansion in the near-term.

Upside risks are 1) targets an underpenetrated market in the enterprise segment, 2) integrations with large ERP and back-office software providers, and 3) low churn given its target customers.

Downside risks are 1) growth is largely dependent on the rate of expansion and adoption in the large enterprise segment and adoption of Vertex's tax automation suite could be seen as a lower priority project which could result in slowing rate of expansion and growth, 2) near term margin pressure from lacking cloud datacenter scale, with cloud gross margin of 66% in FY19, low relative to other SaaS business at this scale (mid 80s) - an inability to drive meaningful scale in the cloud business could weigh on margin over the near and long term, and 3) fairly intense competitive environment from Big 4 accounting firms with outsourced tax services - an inability to maintain key product advantages (such as depth of integration with key large enterprise ERP vendors and broad global tax content database) could present the risk of slowing share gains or share losses which could curb growth.

Weave (WEAV)

Our PO of \$14 represents 4.7x EV/Rev on our 2024 forecast or 0.3x EV/Rev/Growth. This is a discount to the vertical software peer group at 6.8x EV/Rev and 0.5x EV/Rev/Growth. We believe a discount is warranted based on the company's relative newness in the public market and smaller size.

Risks to our price objective are: 1) slower than projected customer growth, 2) margin pressure, and 3) market share loss.

Zeta Global (ZETA)

Our \$14 PO is 3.6x EV/C24E revenue, representing a growth adjusted multiple of 0.2x. The 3.6x multiple we use is a premium to its advertising / marketing-tech peers at 1.9x, warranted given steady revenue growth, coupled with faster EBITDA growth and strong recent execution.

Risks to our price objective: Zeta's proprietary customer data set is disrupted and end customers shift their budgets to other data source vendors and platforms, execution risk in scaling Zeta's business efficiently and customer concentration risk.

ZoomInfo (ZI)

Our \$25 PO is based on a EV/CY24E free cash flow multiple of 27.3x, which is a discount to its horizontal software peers at 37.1x. We think the discount is warranted for better execution and revenue growth reacceleration potential, balanced against recent soft results. Our \$25 PO implies a EV/CY24E revenue multiple of 8.7x, which is a one turn premium to its horizontal software peers at 7.7x.

Downside risks are: macroeconomic downturn, ability to capture share in broader CRM market, upmarket execution, high competition, potential regulatory risks.

Analyst Certification

We, Koji Ikeda, CFA, Adam Bergere, Brad Sills and Michael J. Funk, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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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
	Dropbox	DBX	DBX 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
	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
	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

US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Vertex, Inc.	VERX	VERX US	Brad Sills
RSTR				
	Splunk	SPLK	SPLK US	Brad Sills

Disclosures

Important Disclosures

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: Telecommunications Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	57	51.82%	Buy	43	75.44%
Hold	27	24.55%	Hold	17	62.96%
Sell	26	23.64%	Sell	12	46.15%

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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