U.S. Software

The Q4 Earnings Guide

We see solid Q4 results but highlight that our macro VAR survey questions still show ongoing headwinds. Given the backdrop of more optimistic investors and likely conservative guidance for the new FY from many vendors, we could get limited share price reactions. We see interesting set-ups for SPT, APPN, PAYC, CFLT.

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Q4 - All About FY Guidance: It seems like Q4 saw a continuation of the spending trends we have seen in previous quarters with more predictable markets but no major recovery signals. The result is that Q4 in itself should be solid but offer little surprises either way. This means that the determining factor for the ultimate share price reaction will be guidance for the new FY. Here, we expect the typical conservative approach from many teams. Given the increased confidence that we see for many investors, we are not sure we will see large follow-throughs this quarter. Names with an interesting set-up for Q4 are **SPT**, **APPN**, **PAYC** and **CFLT**.

VAR Results Slightly Weaker With Hope For Recovery Again: Despite all the increased confidence in the financial markets, we saw slightly weaker results in our VAR survey for the past and next quarter (see later in this report). We were surprised about that. Like in previous quarters, there is increased confidence that over the coming 12 months things will get better but this "general" level of confidence has been here for a few quarters already. The MSFT-specific checks were similar to previous quarters. We can see that AI, especially the Azure AI services and to a lesser extend the Office Co-Pilot are very important to customers.

MSFT Solid Q2 But Expectations A Question, Not Expecting Many Surprises at NOW: The main questions for **MSFT**'s Q2 will be (1) Azure growth and (2) feedback from the Office Co-Pilot launch. For the first question we are slightly concerned that some investor expectations are moving beyond consensus (27% YoY). For the second question we only expect qualitative feedback. **NOW** should not have many surprises as the Analyst Day targets very much anchors the 2024 outlook for growth and margins.

Focus On SPT and APPN in SMid: We like the set-up for **SPT** this quarter. The headwinds for the entry level exit are no longer there and Q4 should be a large Social Studio migration quarter, which should enable a healthy Q4. **APPN** in its Q4 guidance buffered for a potential government shutdown and tough macro. Neither came through but consensus never reacted and hence, results could be above expectations.

First Step In The Come Back For CFLT and PAYC: Following tough Q3 results, we could see increased volatility for both **PAYC** and **CFLT**. For CFLT we see room for a beat on cloud, platform and slightly raised FY guidance, which should see a positive reaction. PAYC should be able to beat the quarter by slightly more than the previous quarter's average and likely will raise FY guidance slightly as well, which could get investors to revisit the name.

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Summary of our Ratings, Price Targets and Earnings Changes in this Report (all changes are shown in bold)

	Rating		Price	Price Target			EPS FY1 (E)			EPS FY2 (E)		
Company	**Old**	**New**	**22-Jan-24**	**Old**	**New**	**%Chg**	**Old**	**New**	**%Chg**	**Old**	**New**	**%Chg**
U.S. Software	Pos	Pos										
DigitalOcean (DOCN)	OW	OW	34.85	43.00	43.00	-	1.47	1.47	-	1.76	**1.74**	-1
ServiceNow, Inc. (NOW)	OW	OW	752.45	765.00	**870.00**	14	10.51	**10.50**	-	12.58	12.58	-
Teradata Corp. (TDC)	UW	UW	48.69	46.00	46.00	-	2.01	**2.02**	-	2.46	**2.44**	-1

Source: Barclays Research. Share prices and target prices are shown in the primary listing currency and EPS estimates are shown in the reporting currency. FY1(E): Current fiscal year estimates by Barclays Research. FY2(E): Next fiscal year estimates by Barclays Research. Stock Rating: OW: Overweight; EW: Equal Weight; UW: Underweight; RS: Rating Suspended Industry View: Pos: Positive; Neu: Neutral; Neg: Negative

Summary of Price Target, Model Changes

- **DigitalOcean:** We update our estimates to more accurately account for macroeconomic conditions. Our PT remains at $43, based on ~29x EV/CY25E FCF (unchanged) and CY24E FCF of $219.3mn (unchanged).

- **ServiceNow:** We update our model to better reflect CY24 revenue seasonality and update our valuation methodology to better reflect current valuation trends. We increase our price target to $870 (from $765) based on 45x EV/CY25E FCF (from 40x) and CY25E FCF of $4.04bn (from $4.05bn).

- **Teradata:** We update our model to better reflect expectations for public cloud ARR and revenue due to FX changes and the 8-figure cloud deal now expected to close post Q4 (see details in TDC section), with minimal changes to FCF. We maintain our price target of $46 based on 14x (unchanged) EV/CY25E FCF less lease expense estimate of $372mn (from $374mn).

Earnings Calendar

FIGURE 1. Upcoming Earnings Calendar

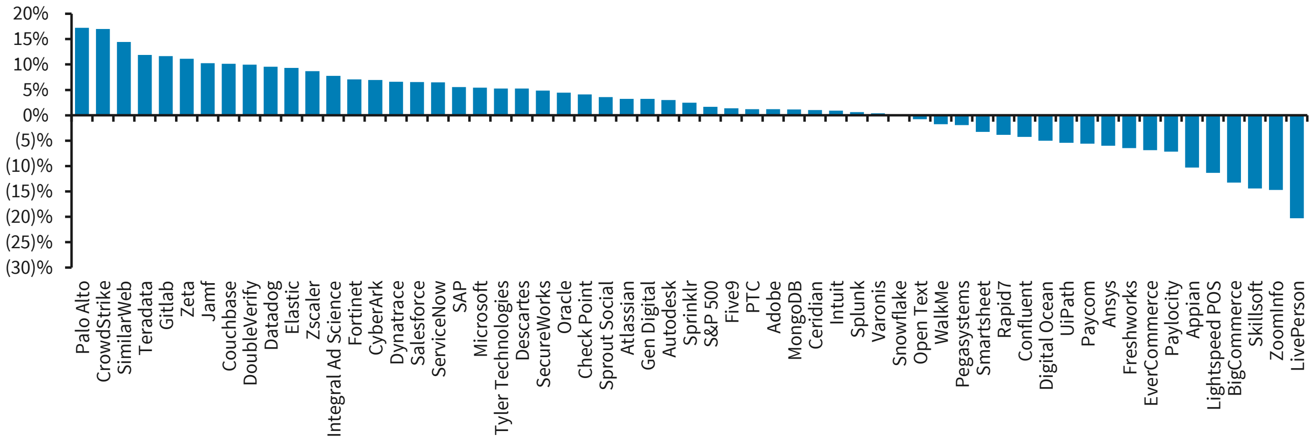
Monday	Tuesday	Wednesday	Thursday	Friday
22-Jan	23-Jan	24-Jan NOW Earnings SAP Earnings	25-Jan	26-Jan
29-Jan	30-Jan MSFT Earnings	31-Jan	1-Feb OTEX Earnings	2-Feb
5-Feb	6-Feb	7-Feb CDAY Earnings CFLT Earnings PAYC Earnings	8-Feb DT Earnings LSPD Earnings PCTY Earnings	9-Feb
12-Feb ZI Earnings TDC Earnings	13-Feb DDOG Earnings	14-Feb	15-Feb APPN Earnings PEGA Earnings* WKME Earnings*	16-Feb
19-Feb	20-Feb SPT Earnings	21-Feb DOCN Earnings	22-Feb BIGC Earnings*	23-Feb
26-Feb	27-Feb	28-Feb JAMF Earnings*	29-Feb DV Earnings* IAS Earnings*	1-Mar

*Bloomberg or StreetAccount Estimate

* Indicates estimated date
Source: Company data, Bloomberg, StreetAccount.

Recent Price Performance

FIGURE 2. Year to Date Price Performance



Prices as of January 19th, 2024. Past performance is not necessarily indicative of future results.
Source: Bloomberg, Barclays Research

Valuation Table

FIGURE 3. Valuation Table

Category	Company	Rating	Current price	Price target	Market Cap USD ($,mn)	P/E 2024E	P/E 2025E	EV/Sales 2024E	EV/Sales 2025E	EV/FCF 2024E	EV/FCF 2025E
Large cap	Intuit	OW	630.61	660	187,293	36.0x	30.6x	11.3x	9.9x	35.8x	29.0x
	Microsoft	OW	396.51	421	2,960,740	32.6x	28.1x	11.1x	9.8x	40.5x	35.1x
	Oracle	OW	110.10	140	310,152	19.0x	17.2x	7.0x	6.4x	30.5x	26.7x
	SAP	OW	163.21	156	189,733	24.1x	20.4x	5.7x	5.2x	30.5x	25.3x
Enterprise SaaS	BigCommerce	EW	8.44	10	708	56.2x	32.3x	2.9x	2.6x	62.0x	23.4x
	Ceridian	EW	67.82	75	11,021	37.1x	30.4x	6.7x	5.8x	78.9x	54.3x
	Descartes	UW	88.47	71	7,701	43.5x	39.4x	11.9x	10.8x	35.8x	27.3x
	DoubleVerify	OW	40.44	43	7,223	41.7x	32.4x	10.0x	8.1x	54.3x	44.4x
	Integral Ad Science	EW	15.51	17	2,588	22.4x	18.3x	5.0x	4.3x	20.1x	15.8x
	Klaviyo	EW	25.15	32	7,708	48.9x	38.8x	7.9x	6.2x	nm	nm
	Lightspeed POS	OW	18.61	23	2,980	69.3x	39.7x	2.1x	1.7x	nm	38.8x
	Paycom	EW	195.21	193	11,777	24.1x	20.6x	6.0x	5.2x	36.4x	28.2x
	Paylocity	EW	153.06	174	8,831	22.7x	19.0x	5.8x	4.8x	29.7x	24.6x
	Salesforce	OW	280.30	300	283,142	29.2x	24.9x	7.3x	6.5x	26.9x	21.5x
	ServiceNow	OW	752.45	870	160,434	59.8x	51.9x	14.6x	12.1x	47.0x	39.1x
	Skillsoft	OW	15.04	30.0	133	nm	nm	1.0x	1.0x	12.5x	9.0x
	Sprinklr	OW	12.34	15	3,709	34.8x	29.1x	3.8x	3.4x	31.1x	20.5x
	Sprout Social	OW	63.64	75	3,787	nm	nm	8.7x	6.7x	94.5x	65.6x
	Workday	OW	289.88	309	80,924	44.7x	39.4x	9.2x	7.9x	38.3x	31.8x
	ZoomInfo	EW	15.77	18	6,702	15.4x	13.7x	6.0x	5.3x	18.1x	14.9x
Big Data	Confluent	OW	22.40	26	7,961	nm	75.1x	7.6x	5.9x	nm	nm
	Couchbase	OW	24.80	26	1,410	nm	nm	6.1x	5.0x	nm	nm
	Elastic	EW	123.22	110	13,385	90.1x	64.0x	9.0x	7.4x	72.4x	47.4x
	MongoDB	OW	413.42	478	33,038	nm	87.0x	16.2x	12.8x	nm	99.9x
	Snowflake	EW	199.08	198	75,421	nm	nm	20.2x	15.8x	73.8x	55.5x
	Splunk	OW	153.29	134	27,193	39.1x	30.3x	6.5x	5.6x	25.1x	20.0x
	Teradata	UW	48.69	46	5,176	19.9x	16.6x	2.8x	2.7x	14.0x	11.7x
Infrastructure	Appian	UW	33.78	35	2,551	nm	nm	3.9x	3.4x	nm	nm
Infrastructure	Datadog	OW	132.98	138	47,337	74.9x	58.6x	18.5x	14.5x	68.9x	55.2x
	DigitalOcean	OW	34.85	43	4,328	20.0x	16.3x	6.9x	6.0x	29.5x	24.7x
	Dynatrace	EW	58.29	52	17,908	48.0x	41.3x	10.6x	8.9x	48.6x	39.8x
	Jamf	EW	19.91	20	2,778	51.6x	37.2x	4.5x	3.8x	25.1x	18.5x
	OpenText	EW	41.70	44	11,577	8.8x	8.2x	3.3x	3.2x	13.8x	11.7x
	Pegasystems	EW	47.90	52	4,064	18.8x	15.6x	2.8x	2.6x	12.7x	11.0x
	UiPath	EW	23.49	23	14,740	49.3x	47.0x	8.6x	7.4x	44.1x	36.4x
	WalkMe	UW	10.48	10	1,027	39.2x	22.2x	2.9x	2.6x	24.5x	16.1x

For full disclosures on each covered company, including details of our company-specific valuation methodology and risks, please refer to http://publicresearch.barcap.com.

Source: Bloomberg, Barclays Research. Prices as of January 19th, 2024 market close. Industry view: Positive. OW = Overweight, EW = Equal Weight, UW = Underweight, RS = Rating Suspended.

Appian (UW/POS, PT $35) - Achievable Setup on Low Expectations

Heading into 4Q23 earnings, APPN has room to outperform low expectations as it hovers around its 52-week low. Management guidance for Q4 incorporated the risk of a government shutdown and tougher macro. This could leave room to surprise to the upside, especially as consensus has not been updated to include the new realities. Further, in Q3 cloud NRR showed an uptick (117% vs 115% for previous 4 quarters), and another solid quarter here could revive excitement in the name in the short term.

- **No Government Shutdown And Talked Down Macro Environment Leave Room for Upside:** During its 3Q23 earnings call, APPN gave conservative guidance by incorporating both a potential government shutdown and macro uncertainty into estimates. However, these were low bars to step over. The government avoided a shutdown in 4Q23, and our checks show a relatively solid spending environment in general.

- **Consensus Estimates May Be Too Low:** Consensus expects total revenue to grow ~12.0% y/y in 4Q23. However, total revenue grew ~19.0% y/y in 4Q20, ~28.6% y/y in 4Q21, and ~19.8% y/y in 4Q22. This trailing three-year average of ~22.5% y/y into 4Q gives a sizable buffer to outperform current low expectations.

- **Maintaining Reacceleration of Cloud Subscription NRR Would Build Momentum:** APPN has recently signaled that it expects most of its growth to come from existing customers, and in 3Q23, Cloud Subscription NRR jumped back up to 117%, its highest level since 1Q22 after four quarters in a row bottoming at 115%. Maintaining this reacceleration of Cloud Subscription NRR would give investors further confidence for results to improve going forward.

FIGURE 4. **Barclays Research vs. Consensus Estimates - Appian**

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23	4Q23		1Q24	1Q24	
Cloud Subscription	78.9	79.4	(1)%	86.9	85.1	2%
Term Subscription	22.3	23.7	(6)%	24.5	26.0	(6)%
Total Subscription (ex-Support)	101.2	103.1	(2)%	111.5	111.1	0%
Maintenance and Support	6.7	6.8	(1)%	6.6	6.8	(2)%
Professional Services	34.2	31.1	10%	37.4	34.1	9%
Total Revenue	142.1	141.0	1%	155.4	152.0	2%
Gross profit, non-GAAP	106.3	103.8	2%	116.3	114.2	2%
% margin	74.8%	73.6%		74.9%	75.2%	
EBITDA	(14.6)	(13.3)	nm	(7.2)	(6.2)	nm
% margin	(10.2)%	-9.5%		(4.7)%	-4.4%	
Net income, adjusted	(16.7)	(17.9)	nm	(11.7)	(11.8)	nm
EPS, adjusted	(0.23)	(0.24)	nm	(0.16)	(0.17)	nm

Source: Barclays Research estimates, Bloomberg consensus

BigCommerce (EW/POS, PT $10) - Cautious Due to Order Volumes and Elongated Sales Cycles

We continue to remain cautious on BIGC with headwinds of elongated sales cycles and lower order volumes going through the platform likely continuing in Q4. Additionally, we suspect Black Friday GMV growth of 6% y/y fell slightly short of expectations with total e-commerce sales growth of 7.5% y/y, according to Adobe Analytics (see BigCommerce: Black Friday GMV Growth Slightly Below Industry Total, 11/27/23). With headwinds on GMV and sales cycles, we do not think the Q4 consensus implied ~3% q/q subscription revenue growth and ~8% q/q PSR growth leaves meaningful room for upside. Similarly, for FY24, we think the consensus implied ~10% y/y total revenue growth is right in-line with where the company will set the initial guide (last quarter management noted internal expectations for high-single to low-double digit growth in FY24) and does not allow for a lot of upside. On margins, BIGC should handily reach its adj. EBITDA breakeven target this quarter, but still the investment story is primarily around growth. As such, we continue to view BIGC as a wait and see story until revenue growth re-accelerates off of improved order volumes and customer adds, and recommend investors stay on the sidelines.

FIGURE 5. Barclays Research vs. Consensus Estimates - BigCommerce

$, mn	Barclays 4Q23	Consensus 4Q23	Difference vs. cons.	Barclays 1Q24	Consensus 1Q24	Difference vs. cons.
ARR	339.3	338.8	0%	345.6	345.4	0%
Subscription Revenue	60.5	60.3	0%	59.6	60.2	(1)%
Partnership & Services	19.7	20.8	(5)%	19.2	19.9	-3%
Total Revenue	80.2	81.1	(1)%	78.8	80.0	(2)%
Gross profit, non-GAAP	61.8	62.5	(1)%	61.0	62.1	(2)%
% margin	77.0%	77.1%		77.5%	77.7%	
Operating profit, adj.	2.4	2.3	3%	2.8	2.7	4%
% margin	3.0%	2.9%		3.5%	3.3%	
Net income, adjusted	1.4	3.5	nm	2.5	3.7	nm
EPS, adjusted	0.02	0.05	nm	0.03	0.05	nm

Source: Barclays Research estimates, Bloomberg consensus

Ceridian (EW/POS, PT $75) - Visibility into Q4 Acceleration; Key Focus on FY24 Guidance and Moving Parts

We expect CDAY to deliver a solid Q4 with guidance implying an acceleration in underlying Dayforce recurring ex-float revenue to 25.2% y/y from 24.4% in Q3 (cc and ex-tax migration benefit of ~430bps) while peers expect decelerating growth. CDAY's expected acceleration is mainly driven by large customer go-lives in Q4, and the company seems to have good visibility here with weekly check-ins around go-live progress, etc.

The bigger question this quarter will be initial FY24 Dayforce recurring ex-float guidance as management has discussed plans to move over its Powerpay business to the Dayforce line item in FY24, but is unsure on the timing of this (e.g., do all at once, in parts). Consensus is modeling 19.2% y/y growth for Dayforce recurring ex-float for FY24 versus the underlying Q4 exit rate of ~25%, which seems manageable, though we note ~$36mn in tax migration revenue in FY23 from the former Bureau business will be dilutive to growth in FY24. Hence, this paired with our view of moderating HCM demand leads to little potential upside to consensus underlying FY24 Dayforce recurring ex-float estimates, though we could see the reported number come in decently above consensus if CDAY moves over the ~$82mn in Powerpay recurring ex-float revenue to Dayforce, which would be an ~8.5% y/y growth benefit.

Management has held to its $2bn total revenue target in FY25, and we note consensus is modeling linear growth to reach this. Hence, while there are some moving parts around Dayforce growth, we expect minimal upside to consensus FY24 total revenue estimate of $1.74bn (~15% y/y growth). Overall, these expectations are relatively positive versus HCM/ payroll peers, though we see this reflected in current valuation (~54x EV/CY25E FCF vs. PAYC ~28x and PCTY ~24x). We maintain our EW rating.

FIGURE 6. **Barclays Research vs. Consensus Estimates - Ceridian**

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23E	4Q23E		1Q24E	1Q24E	
Dayforce Recurring Revenue Ex-Float	256.8	256.4	0.2%	277.8	273.3	1.6%
y/y growth	30%	29%		21%	19%	
Cloud Recurring Revenue	318.7	318.2	0.2%	350.8	351.0	(0.0)%
Cloud Revenue	373.6	373.1	0.1%	406.7	402.1	1.1%
y/y growth	25%	25%		18%	17%	
Total Revenue	398.6	399.6	(0.2)%	430.4	427.0	0.8%
y/y growth	19%	19%		16%	15%	
Gross profit, non-GAAP	185.5	189.8	(2.3)%	209.7	210.0	(0.1)%
% margin	46.5%	47.5%		48.7%	49.2%	
EBITDA, adjusted	98.5	98.6	(0.1)%	123.7	125.1	(1.1)%
% margin	24.7%	24.7%		28.7%	29.3%	
EPS, adjusted	0.32	0.32	nm	0.45	0.44	nm

Source: Barclays Research, Company data, Bloomberg for consensus.

Confluent (OW/POS, PT $26) - Small Step in Comeback

Following disappointing Q3 results, we think Confluent reset expectations enough to deliver a better outcome with a larger beat seen than in recent quarters, which could lead to renewed interest amidst low sentiment. Consensus is modeling ~$6.0mn in q/q cloud revenue adds, or ~43% y/y growth, compared to $8mn added in Q3 for 61% y/y growth. While Confluent is seeing pressure from two customers and from its consumption-based GTM transition, this seems manageable given cloud NRR was just above 140% in Q3. Hence, we could see closer to 46% y/y growth, or ~$8mn in q/q cloud revenue.

The bigger source of upside in Q4 could be from Platform revenue, where consensus is modeling ~10% y/y growth after growth accelerated to 19.4% in Q3. This growth implies a -$2mn q/q add, which seems unlikely as Q4 typically sees stronger seasonality for Platform, particularly on the license side, and as CFLT continues to see strong customer interest in a hybrid architecture. Continued strength here could see CFLT deliver closer to 18% y/y growth for Platform. Overall, this could lead to ~5% total revenue beat compared to CFLT's 3.0% four-quarter beat average. Further, this upside scenario could allow for CFLT to slightly raise its 22% y/y FY24E total revenue growth guide.

Overall, these results could help improve sentiment for the story, though we think investors will need to see a couple consecutive quarters in a row of stabilizing consumption and commentary that CFLT's Flink solution is seeing traction to regain full confidence on Confluent's TAM opportunity. We maintain our Overweight rating.

FIGURE 7. Barclays Research vs. Consensus Estimates - Confluent

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q 23E	4Q 23E		1Q 24E	1Q 24E	
Confluent Platform	94.8	95.6	(0.9)%	94.8	95.8	(1.1)%
y/y growth	9%	10%		9%	10%	
Confluent Cloud	97.5	97.6	(0.2)%	103.0	103.4	(0.4)%
y/y growth	43%	43%		40%	41%	
Professional Services	12.4	11.7	5.9%	14.6	12.9	12.8%
Revenue	204.6	205.5	(0.4)%	212.4	211.3	0.5%
y/y growth	21%	22%		22%	21%	
Gross profit, Non-GAAP	155.0	155.1	(0.1)%	159.0	156.7	1.5%
% margin	*75.8%*	*75.5%*		*74.9%*	*74.2%*	
Operating profit, Non-GAAP	0.5	1.3	nm	(2.0)	(8.7)	nm
% margin	*0.3%*	*0.7%*		*(0.9%)*	*(4.1%)*	
Net income, Non-GAAP	19.0	17.2	nm	17.0	8.9	nm
Non-GAAP EPS	0.05	0.05	nm	0.04	0.02	nm

Source: Barclays Research, Company data, Bloomberg for consensus.

Datadog (OW/POS, PT $138) - Strong Q4 Expected, but FY Guidance Remains the Deciding Factor

Following a strong Q3 in which the company posted its largest revenue beat of 2023 (+4.5%), expectations are high for Datadog in Q4, with investors likely expecting accelerating growth q/q as the company continues to lap optimization headwinds. The setup for the quarter looks very achievable - consensus is modeling ~4% revenue growth q/q (vs. 14.3% q/q on average over the past three years, and 7.5% in Q4 2022), and with management having previously said trends in early Q4 were the strongest they have seen all year, we believe that a similar q/q growth rate to last quarter (+7.5%, or $41.5mn in net new revenue) seems fair. This is supported by the fact that Q4 has been sequentially larger than Q3 on a dollar basis for every year DDOG has been public, and with $38mn in net new added last quarter, we think a slight uptick to >$40mn feels appropriate.

However, as with all fiscal Q4 names, focus will rest primarily on upcoming FY guidance. Here, we are more cautious, as Datadog has historically been very conservative . Consensus is currently modeling 22-23% revenue growth for the coming year, which feels appropriate to us given the level of conservatism management has shown the past few quarters. However, expectations seem to have crept up over the last few weeks, which we think could be overly ambitious, as the company will want to avoid a guide down during FY24, similar to what happened in 2Q23. Though with the valuation already full at 13x CY25E EV/Sales (51x CY25 EV/FCF), guiding to consensus could be viewed as a miss to investors, even when keeping in mind the 5% beat management likely will strive for through the year. Another important thing to keep in mind is that the company will be hosting an analyst day two days following Q4 earnings, which could make the coming results less of an event for the stock.

FIGURE 8. Barclays Research vs. Consensus Estimates - Datadog

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23	4Q23		1Q24	1Q24	
Total Revenue	589.0	568.9	4%	588.3	586.4	0%
y/y growth (%)	25.5%	21.2%		22.1%	21.7%	
Gross Profit	480.0	464.0	3%	470.6	474.4	(1)%
% margin	81.5%	81.6%		80.0%	80.9%	
Operating profit, Non-GAAP	135.5	132.0	3%	114.1	123.0	(7)%
% margin	23.0%	23.2%		19.4%	21.0%	
Net income, Non-GAAP	158.5	155.5	2%	134.3	142.1	(6)%
Non-GAAP EPS	0.45	0.44	2%	0.38	0.40	(5)%

Source: Barclays Research estimates, Bloomberg consensus.

DigitalOcean (OW/POS, PT $43) - Less Uncertainty Than Before, but Questions Remain

Following a stronger Q3 and the appointment of a new CEO, we are more constructive on the overall DigitialOcean story. Numbers inflected nicely last quarter (~$32mn in net new ARR, helped by ~$12mn from Paperspace), and we believe the setup this quarter likely positions the company for a similar beat. Consensus is modeling ~$17mn in net new ARR, which feels conservative to us as Paperspace is likely to grow further in contribution, and management noted the core business began to see signs of stabilization last quarter (less contraction vs. the start of the quarter, and expansion headwinds bottoming out). As such, NRR is expected to increase this quarter, though we expect it to remain under 100% in the short term as SMB is likely to recover slower than enterprise as we head into 2024.

Looking at the setup for the new fiscal year, consensus ARR growth of ~13.7% seems fair given the improving macro, and net new ARR of ~$100mn would be above 2023 levels (expected $74mn), but below 2022 levels ($168mn). However, we believe expectations for Q1 may be too high, as the ~5% q/q consensus growth rate is more akin to 2022 and 2021 levels, vs. the pressured selling environment DOCN is currently in. On margins, the company continues to deliver healthy levels (and beats) each quarter, though we continue to caution uncertainty as Paperspace CapEx ramps (particularly with Nvidia H100 GPUs coming online in Q1). As such, while cash flow remains healthy, at 25x CY25E EV/FCF, we believe upside could be muted this quarter should the company be more prudent in its commentary and guidance on both the top and bottom line.

FIGURE 9. Barclays Research vs. Consensus Estimates – DigitalOcean

$, mn	Barclays 4Q23	Consensus 4Q23	Difference vs. cons.	Barclays 1Q24	Consensus 1Q24	Difference vs. cons.
Total Revenue	178.0	178.0	0%	186.9	181.9	3%
Operating Profit, adj.	34.6	41.3	-16%	40.9	42.5	-4%
% margin	19.5%	23.2%		21.9%	23.4%	
Operating Cash Flow	52.5	67.6	-22%	68.4	62.4	10%
Capex	(28.9)	(33.7)	nm	(29.9)	(28.5)	nm
Adj. Free Cash Flow	23.6	32.4	nm	38.5	36.4	6%

Source: Barclays Research estimates, Bloomberg consensus.

DoubleVerify (OW/POS, PT $43) – Room to Beat, but Less Likely to Be Aggressive on Guide

We see DoubleVerify as well set up to beat consensus numbers in the seasonally most important Q4. Currently, consensus is modeling only a ~19% q/q growth rate, which is about in line with Q4 performance last year. That quarter (4Q22) was the lowest q/q growth for a Q4 on record and was weighed by a weak December 2022, cited as the trough of the ad macro in its most recent slump. Looked at another way, the Q4 consensus y/y growth rate of 28.7% is a 40bp acceleration from Q3, but goes up against a 9pt easier comp. Either way you analyze it, we see DV as primed for a beat in the quarter and we turn to the FY24 guide as the biggest question to answer. Here we see some moving parts with the easy starting point (consensus FY24 growth of 23.8% is a ~3pt deceleration y/y), expected strong ad macro (Magna forecasting 9.4% y/y digital ad spend growth), and contribution from the recently announced move into brand safety in Meta live feeds as drivers of upside. Despite plenty of runway here, we caution any super aggressive initial guidance to match this, especially given the conservative track record of management. Also, how management will communicate and size the Meta opportunity remains a key question. Hence, we are positive on the LT story and quarter, but think a conservative guide can limit any very near-term upside potential.

FIGURE 10. Barclays Research vs. Consensus Estimates - DoubleVerify

$, mn	Barclays 4Q 23	Consensus 4Q 23	Difference	Barclays 1Q 24	Consensus 1Q 24	Difference
Measurement	61.2	60.5	1%	50.4	51.3	-2%
Activation	99.0	99.7	-1%	87.4	87.3	0%
Supply-Side	11.6	11.8	-1%	10.7	11.6	-8%
Total Revenue	**171.8**	**171.9**	**0%**	**148.5**	**149.0**	**0%**
y/y growth	*28.5%*	*56.5%*		*21.1%*	*21.5%*	
Gross profit, adjusted	138.4	139.0	0%	120.2	120.2	0%
% margin	80.6%	80.9%		81.0%	80.7%	
EBITDA, adjusted	59.4	59.2	0%	43.4	40.7	7%
% margin	34.6%	34.4%		29.2%	27.3%	
Net income, adjusted	44.2	nm	nm	34.0	nm	nm
EPS, adjusted	0.25	nm	nm	0.19	nm	nm

Source: Barclays Research estimates, Bloomberg consensus

Dynatrace (EW/POS, PT $52) - Straightforward Q3 Setup, But Less Visibility into 2024

Dynatrace has a relatively straightforward setup this quarter as the company is set to report the first portion of its back end loaded FY. Similar to Q2, we expect Dynatrace to deliver solid results in Q3, though the lack of near term catalysts this quarter keeps us more on the sidelines as the company does not guide its new fiscal year until next quarter. DT does not reap the same benefits as a direct consumption model like DDOG, meaning that while it should benefit from easing optimizations, the impact is likely to not be as outsized given the subscription oriented business model. With that said, Dynatrace should again deliver a beat in-line with previous quarters, as consensus is modeling ~5.4% q/q ARR growth vs. ~10% historically, and the company has done a fair job cross-selling and up-selling the existing base with its Logs on Grail and Security businesses.

As we look further into 2H, we see opportunity for the story to become more interesting with Grail on Azure having become generally available during the quarter, the company shifting toward DPS-focused selling, and continued strength in new logos. Although recent adds have been lower vs. historical levels, the dramatic improvement in land size over the past few quarters has helped to drive incremental upside ($100k in 3Q23 vs. $140k in 2Q24). Management noted that contribution to net new ARR from new logos should approach 40% this quarter, and we see opportunity for further upside here should net adds begin to inflect higher again. On margins, management has expressed its desire to invest in incremental sales capacity starting in 2H, which could pressure OPM and FCF through the remainder of the year (though consensus expectations of ~$20mn in incremental Opex for Q3 could be ambitious), and as such limit near term outperformance with current valuation levels already high (38.4x CY25E EV/FCF).

FIGURE 11. Barclays Research vs. Consensus Estimates - Dynatrace

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	3Q24	3Q24		4Q24	4Q24	
ARR	1,415.8	1,409.3	0%	1,484.1	1,486.3	(0)%
Total Revenue	356.8	357.7	(0)%	375.4	373.2	1%
Gross Profit	303.2	302.5	0%	318.8	314.6	1%
% margin	85.0%	84.6%		84.9%	84.3%	
Operating profit, Non-GAAP	95.6	96.0	(0)%	90.5	88.8	2%
% margin	26.8%	26.8%		24.1%	23.8%	
Net income, Non-GAAP	83.3	83.6	(0)%	77.4	77.3	0%
Non-GAAP EPS	0.28	0.28	(0)%	0.25	0.25	0%

Source: Barclays Research estimates, Bloomberg consensus.

Integral Ad Science (EW/POS, PT $17) – Bullish on Q4 Beat Likelihood, Guidance Keeps Us Sidelined

We see a similar situation with IAS as we do with peer DV, meaning a probable Q4 beat balanced by risk to guidance limitations. With IAS, we see both aspects as more pronounced, though. The consensus q/q revenue growth rate of ~9% is well below the historical Q4 average of ~25% and the 4Q22 rate of ~16%. We see this setting IAS up well heading into the print and view a beat as likely across both Advertiser segments. Despite this, the guidance for both Q1 and more so for FY24 is what is keeping us on the sidelines for this quarter.

For Q1, consensus is modeling 12.9% y/y growth, which would be a 1pt acceleration from Q4 on a ~4.5pt tougher comp. In this light, it is difficult to have conviction on a Q1 guidance beat. For FY24 guidance, we see a similar story as consensus of 15.8% y/y growth is modeling a 1pt acceleration. While there are several growth drivers that could aid here, we note that this contrasts with expectations for peer DV, which assume a 3pt deceleration in the FY guide. Also, one of the most cited incremental growth drivers for this year, Meta unlocking its live feed for brand safety, has not been announced to be GA yet, and even if it is before earnings, the conservative management team may be less aggressive in guiding to a major contribution here. Hence, we see more of an in-between quarter and reiterate our Equal Weight rating.

FIGURE 12. Barclays Research vs. Consensus Estimates - Integral Ad Science

$, mn	Barclays 4Q 23	Consensus 4Q 23	Difference	Barclays 1Q 24	Consensus 1Q 24	Difference
Measurement	51.5	52.1	-1%	46.5	48.4	-4%
Optimization	61.7	61.4	0%	56.9	57.5	-1%
Publisher	18.2	18.0	1%	15.5	15.2	2%
Total Revenue	**131.4**	**131.3**	**0%**	**119.0**	**119.7**	**-1%**
y/y growth	***11.9%***	***11.8%***		***12.2%***	***12.9%***	
Gross profit, non-GAAP	105.1	104.2	1%	95.2	95.0	0%
% margin	80.0%	79.4%		80.0%	79.3%	
EBITDA, adjusted	46.0	46.2	0%	39.3	38.9	1%
% margin	35.0%	35.2%		33.0%	32.5%	
Net income, adjusted	32.2	nm	nm	24.2	nm	nm
EPS, adjusted	0.21	nm	nm	0.16	nm	nm

Source: Barclays Research estimates, Bloomberg consensus

Jamf (EW/POS, PT $20) - Lasting Seat Pressures Limit Near Term Catalysts

We see Jamf's upcoming Q4 as lacking in catalysts, and hence remain on the sidelines. Consensus is modeling ~3.5% q/q growth for ARR this quarter (vs. 5.8% historical average), which would be in line with growth from the past two quarters, and seems fair given the continued seat-based headwinds the company is seeing. Security continues to be a valuable growth asset for the business (36% y/y ARR growth last quarter), though at only 21% of ARR, the uplift here is not enough to account for the continued strain on up-sell opportunities in core MDM. With this in mind, during Q3 earnings, management cautioned that DBNRR should once again tick down (~107% vs. 108% in Q3), illustrating that device expansion headwinds for JAMF have still not yet bottomed out.

Looking at expectations for FY24, consensus is already modeling in a healthy reacceleration in ARR (17% y/y growth, ~$100mn net new), which we believe leaves little room for upside in the near term, particularly when thinking about the wave of layoffs that have been announced to start 2024. On the margin side, Jamf has shown healthy growth over the past year, which we believe should continue in the new year, though cash flow issues (smaller upfront billings) could weigh on numbers if they continue beyond Q3. As such, we believe Jamf will continue to be a wait and see story, with device expansion and new customer additions inflecting being the catalysts needed to get investors interested in the story once more.

FIGURE 13. Barclays Research vs. Consensus Estimates - Jamf

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23	4Q23		1Q24	1Q24	
ARR	586.0	587.4	(0.2)%	603.1	604.7	(0.3)%
Total Revenue	148.3	148.6	(0.2)%	149.7	150.7	(0.6)%
Gross Profit	121.6	121.7	(0.1)%	122.8	123.4	(0.5)%
% margin	82.0%	81.9%		82.0%	81.9%	
Operating profit, Non-GAAP	19.6	20.0	(2.2)%	16.6	13.7	21.4%
% margin	13.2%	13.5%		11.1%	9.1%	
Net income, Non-GAAP	14.9	16.6	(10.4)%	12.6	11.5	10.1%
Non-GAAP EPS	0.11	0.10	6.8%	0.09	0.07	29.6%

Source: Barclays Research estimates, Bloomberg consensus.

Klaviyo (EW/POS, PT $32) - Questions to Answer in Q4, but More Reasonable Valuation

Despite strong Q3 results (5% top-line beat), Klaviyo shares traded down after earnings as the guidance prompted skepticism from some investors. Specifically, when backing out the pricing benefit, which will be lapped in Q4, revenue grew ~40% in Q3. In order for Klaviyo to beat the top-line at the same 5% magnitude in Q4, it would need to grow ~42% or a 2pt acceleration q/q when stripping out pricing. Hence, investors had to grapple with the likelihood of this acceleration (during an uncertain holiday shopping season at the time), or apply smaller beats going forward. We think the Q4 beat level will drive much of the after-hours response as a large beat could mean the management team is just being prudent. Either way, this level could be an indicator of the guidance philosophy to come and be used to truly assess the quality of the FY24 guide. Also, SMS metrics have not been reported since IPO and investors will closely watch if the company chooses to disclose any more color here. SMS is more Q4 weighted and comes in at generally lower margins, so this metric could provide more clarity into the seasonality and margin level going forward. Finally, management could also be tasked with addressing the foreseen impact from the email changes at Google and Yahoo, which are slated to begin on February 1st. In summary, we see plenty of questions for management to answer in this print. However, given the reset valuation at ~6x EV/CY25E Sales (roughly in-line with broader SaaS now), we think sufficient answers could serve to make the investment case more attractive.

FIGURE 14. Barclays Research vs. Consensus Estimates - Klaviyo

$, mn	Barclays 4Q 23	Consensus 4Q 23	Difference vs. cons.	Barclays 1Q 24	Consensus 1Q 24	Difference vs. cons.
Revenue	196.3	196.0	0%	197.3	199.4	(1)%
% y/y growth	35.1%	35.0%		26.4%	27.8%	
Gross profit, non-GAAP	141.3	140.3	1%	151.9	150.4	1%
% margin	72.0%	71.6%		77.0%	75.4%	
Operating profit, adjusted	16.3	15.8	3%	28.5	25.9	10%
% margin	8.3%	8.1%		14.4%	13.0%	
Net income, adjusted	24.8	23.4	6%	37.1	33.2	12%
EPS, adjusted	0.10	0.08	nm	0.14	0.11	nm

Source: Barclays Research estimates, Bloomberg consensus.

Lightspeed (OW/POS, PT $23) - Payments Uptake May Be Slightly Subdued Due to Holiday Season

We do not see Q3 specifically as a buying opportunity since we are cautious on payments uptake as part of the ongoing "unified payments" strategy (making LSPD payments mandatory or otherwise pay an additional transaction fee) this quarter with customers more hesitant to switch their provider in the busy holiday season. Company attention is also shifting toward the international payments rollout, and this could prove to be slightly more difficult than in North America as European merchants are not as accustomed to using the same vendor for software and payments. Separately, the payments take-rate continues to drop y/y (2.3% in 2Q24 vs. 2.7% in 2Q23) and we expect this trend to continue, due to broader industry competition, a trend toward signing higher GTV customers, and lower rates internationally than in North America. For these reasons, we do not think the consensus implied Q3 q/q transaction revenue growth of ~4% leaves meaningful room for upside. For FY24 as well, consensus is slightly above the guidance range and, as such, we think a substantial beat here is unlikely. All in, we like the long term strategy around unified payments but do not see this quarter specifically as a good investment opportunity, with the holiday season and international focus likely leading to a slight slowdown in payments penetration.

FIGURE 15. Barclays Research vs. Consensus Estimates - Lightspeed

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	3Q24	3Q24		4Q24	4Q24	
Subscription Revenue	82.2	80.6	2%	83.3	81.4	2%
Transaction Revenue	143.5	147.0	(2)%	134.7	141.5	(5)%
Merchant Services Revenue	9.9	8.8	12%	10.1	8.6	19%
Total Revenue	235.6	236.3	(0)%	228.2	231.5	(1)%
Gross Profit	101.3	99.4	2%	100.4	98.8	2%
% margin	43.0%	42.0%		44.0%	42.7%	
Adjusted EBITDA	2.0	2.6	nm	5.0	5.8	nm
% margin	0.9%	1.1%		2.2%	2.5%	

Source: Barclays Research estimates, Bloomberg consensus

Microsoft (OW/POS, PT $421) - Azure Inflection Remains Focal Point, While Copilot Offers Long Term Excitement

Microsoft surprised investors positively last quarter with a 2pt beat to Azure, driven by greater than expected AI contribution and an apparent stabilization in underlying growth. Once again the company appears poised to deliver on high expectations this quarter, with the high-end of Azure guidance implying 23% growth y/y for the underlying business (assuming 4pts of AI), which feels conservative to us given the 25% core business growth from last quarter. It is also slowly becoming apparent that the the investment case for Microsoft may be starting to separate from just Azure, as M365 Copilot adoption is becoming a focal point in the investment community and driving a renewed interest in Office. While we do not expect this quarter to be overly revealing with regard to numbers (nor do we expect a large amount of adoption at this time), we expect commentary to remain positive; coupled with easing comps across the business, this should give investors multiple catalysts to be excited for.

- **Azure Should Excite This Quarter, but We Warrant Caution:** Consensus is currently calling for ~26.8% Azure growth y/y in cc, which sits at the high end of the 26-27% cc guide from the last quarter, and equates to ~6.6% sequential growth (vs. an average of 13.1% in Q2 over the past four years), or $1.095bn in sequential dollars added. We believe expectations are high among the investor community coming into the quarter; still, the setup here feels promising to us. Core Azure business continues to lap optimization headwinds from last year, while AI should continue to grow at a rapid pace and constitute a greater portion of the business. On its Q1 earnings call, Microsoft stated that AI should account for a greater portion of Azure on a go forward basis, and assuming this reaches 4pts of growth this quarter (vs. 3pts in Q1), the run rate on these services would be ~$2.5bn after just three quarters of availability. It's important to note that in tandem with greater AI usage, complementary services including storage, compute, and databases are likely to inflect higher as well, which should help with underlying core Azure growth. Backing out the AI component from Azure this quarter gives core growth a cc y/y range of 22-23%, which would be a 2-3 pt deceleration vs. last quarter, and seems overly buffered in our view given the aforementioned reasons, as well as strong Azure checks from both our VAR and CIO surveys. This bodes favorably for the guide as well, as comps continue to ease in the back half of the year. However, given that Microsoft is the most crowded long in Software at this time, we do warrant caution as investor expectations continue to rise - last quarter was the largest beat in over eight quarters, and Microsoft tends to not guide as conservatively as other names in the space. Hence, while we expect a beat and anticipate Azure closer to the 28-29% range, should investors end up over their skis a bit (closer to 30% y/y growth), the aftermarket reaction could end up more muted than anticipated.

- **Easing Comps Across PBP and MPC, Office Copilot a Medium-Term Catalyst but Not Expected in Numbers Yet:** Office Copilot became generally available to enterprises about halfway through Q2, and while we do not expect adoption to be high at this time, early indicators around the productivity uplift and benefit organizations are receiving from the product is encouraging. In our 2024 outlook (see U.S. Software: 2024 Outlook: Putting Both AI and SMID Cap Hype to the Test, published 01/12/24), we highlighted how even 1% penetration amongst E3/E5 seats has the potential to uplift Office growth by ~2pts, not inclusive of SKU upgrades, and as such we believe any commentary around deal sizes or broader adoption trends will be received positively, even if not yet seen in numbers. The product also recently went GA for SMBs and individuals, which offers Microsoft an even greater TAM than before, though adoption here will likely lag enterprise. Looking at the numbers, consensus is modeling ~12.5% y/y growth for Office this quarter, which is roughly in line with the four year average, though we see upside here should SKU conversions come in better than expected. We also highlight Windows this quarter, which we believe should inflect further as the PC market continues to bottom out, with the business also benefiting from 21pt easier comp. The same goes for Devices, Gaming (ex. ATVI), and Advertising. With this in mind, we could see upside to margin, though greater investment in Azure could counteract any improvements in PBP or MPC OPM.

- **AI Reads Positively in Our VAR Survey, but Near Term Outlook Remains Muddled:** Interest in Microsoft's AI offerings was notably higher this quarter vs. last, with 100% of VARs reporting moderate to high interest in Azure OpenAI service, and 90% moderate to significant interest in M365 Copilot. The quarter itself looked good for Microsoft as well; every VAR once again said that performance was better than expected in the quarter, with 50% saying they performed 5%+ better than they initially believed. Once again, though, more VARs also indicated that they expected business to be down next quarter when compared to last year, more in line with levels from December 2022 and March 2023. With regard to Azure, 40% of VARs said that 80-100% of their clients were planning on using Azure in the coming 12 months, while an additional 50% said that 60-80% of their client base would be. Also positive, the percentage of workloads viewed as incremental to Microsoft stood at 40%, lower than last quarter but still high vs. historical readings. The percentage of customers splitting basic and premium workloads 50-50 (70%) rose again to its highest level, with Security and Monitoring solutions remaining the highest priorities for vendors. Overall, we are encouraged by the survey results this quarter, and believe there is opportunity for further improvement with catalysts in the coming months. We include the full survey later in this report for reference.

FIGURE 16. Barclays Research vs. Consensus Estimates - Microsoft

$, mn	Barclays (2Q24)			Barclays (3Q24)		
	GAAP	Consensus	Difference	GAAP	Consensus	Difference
Productivity and Business Processes	**19,056**	**19,030**	0%	**19,266**	**19,607**	(2)%
Intelligent Cloud	**25,249**	**25,285**	(0)%	**25,668**	**25,866**	(1)%
More Personal Computing	**16,612**	**16,887**	(2)%	**14,975**	**15,450**	(3)%
Total Revenue	**60,917**	**61,106**	(0)%	**59,909**	**60,936**	(2)%
Commercial Cloud Revenue	**33,464**	**32,213**	4%	**34,180**	**33,646**	2%
Gross profit	41,382	41,522	(0)%	40,619	41,494	(2)%
% margin	67.9%	68.1%	(0)%	67.8%	68.1%	(0)%
Operating profit	25,789	25,529	1%	24,952	24,121	3%
% margin	42.3%	42.5%	(0)%	41.6%	40.8%	2%
Net income	20,182	20,765	(3)%	19,625	19,955	(2)%
EPS	2.70	2.78	(3)%	2.64	2.65	(1)%
Operating Cash Flow	17,251	16,467	5%	29,608	26,819	10%

Source: Barclays Research, Bloomberg consensus

OpenText (EW/POS, PT $44) – Upside Limited This Quarter

We are cautious on the quarter for OTEX with the recently released AI Aviator products unlikely to provide a material revenue uplift yet and macro headwinds on the SMB customer base of $10-15mn expected this quarter. With that, we do not think the Q2 consensus implied q/q revenue growth of ~5% (in-line with the prior two year q/q growth) leaves meaningful room for a beat. We are also below the Street on Q3 license revenue as we think the consensus ~$214mn level, implying ~53% y/y growth, looks slightly elevated. The Q2 consensus Adj. EBITDA margin of 36.8% is at the high end of the company's guide and with a ~220bps implied q/q step-up, we think upside to this level is limited. The Micro Focus integration seems to be trending well, but with renewal rates in the mid-80s at the end of Q1, there is still progress needed to reach the high-80s FY24 goal. At ~11x EV/CY25E uFCF, shares do not look overly expensive, but the expected SMB headwinds and likely lack of material AI contribution continue to keep us on the sidelines for this quarter.

FIGURE 17. Barclays Research vs. Consensus Estimates - OpenText

$, mn	Barclays 2Q24	Consensus 2Q24	Difference	Barclays 3Q24	Consensus 3Q24	Difference
Cloud Services	451.6	450.5	0%	461.6	458.4	1%
Customer Support	674.2	686.1	(2)%	645.0	673.6	(4)%
License	253.7	246.1	3%	163.5	213.7	(23)%
Service & Other	106.1	107.1	(1)%	109.5	108.5	1%
Total Revenue	1,485.5	1,489.7	(0)%	1,379.6	1,454.2	(5)%
y/y growth	*66%*	*65%*		*11%*	*71%*	
Gross profit, non-GAAP	1,153.4	1,166.7	(1)%	1,053.2	1,137.4	(7)%
% margin	77.6%	78.3%		76.3%	78.2%	
EBITDA, adjusted	544.3	548.7	(1)%	508.3	544.7	(7)%
% margin	36.6%	36.8%		36.8%	37.5%	
Net income, adjusted	322.2	326.0	(1)%	298.9	321.0	(7)%
EPS, adjusted	1.18	1.19	(0)%	1.10	1.18	(7)%

Source: Barclays Research estimates, Bloomberg consensus

Paycom (EW/POS, PT $193) - Better Set-up After Reset Expectations, Questions Remain

We expect a less volatile print for PAYC as reset expectations leave enough room for a potentially larger revenue beat than PAYC has shown in recent quarters. Consensus is modeling ~$17mn q/q recurring revenue add in Q4 compared to $36mn added in Q4 '22 and $29mn in Q4 '21. Transitory headwinds from PAYC focusing its CRR reps on BETI conversions as opposed to cross-selling revenue will likely remain a headwind in the quarter, though the labor market backdrop remains constructive as the US added an average 165k jobs in the economy in Q4 (vs. 221k/month in Q3). If PAYC maintains its q/q add cadence demonstrated over the past two quarters (~$12mn lower add vs. same period in FY22), it would deliver an ~$5-7mn top-line beat, or ~1.7% beat vs. PAYC's 0.6% four-quarter average. Given low expectations along with a small raise to PAYC's 10-12% y/y FY24 total revenue growth guidance, at least on the low end, this could lead investors to revisit the story.

Consensus is modeling ~41% adj. EBITDA margin for FY24 compared to ~42.5% est. for FY23, which we think appropriately reflects the lower growth outlook and potential investments to fuel PAYC's international expansion. Overall, fundamental questions remain given PAYC's traditional reliance on new customer growth (as opposed to expansion revenue), and hence, investors will likely need to see a couple consecutive quarters of stabilization before taking larger positions in an industry leader. Therefore, we see Q4 results as only the first step to recovery and maintain our Equal Weight rating.

FIGURE 18. Barclays Research vs. Consensus Estimates - Paycom

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23E	4Q23E		1Q24E	1Q24E	
Total Revenue	423.5	423.1	0%	506.0	501.0	1%
y/y growth	14.3%	14.2%		12.0%	10.9%	
Gross profit, non-GAAP	355.8	355.9	(0)%	434.2	430.3	1%
% margin	84.0%	84.1%		85.8%	85.9%	
Operating profit, adjusted	136.2	138.8	(2)%	198.3	202.6	(2)%
% margin	32.1%	32.8%		39.2%	40.4%	
EBITDA, adjusted	171.9	171.6	0%	235.6	234.6	0%
% margin	40.6%	40.6%		46.5%	46.8%	
Net income, adjusted	102.0	103.3	(1)%	150.2	150.8	(0)%
EPS, adjusted	1.76	1.78	(1)%	2.59	2.62	(1)%
Operating Cash Flow	105.1	130.2	(19)%	157.0	146.8	7%
% margin	24.8%	30.8%		31.0%	29.3%	

Source: Barclays Research, Company data, Bloomberg for consensus.

Paylocity (EW/POS, PT $174) - More Comfort in 2H Acceleration After End of Year Selling Season

We see Paylocity with a manageable set-up in its fiscal Q2 ’24 quarter as consensus is modeling ~2.5% q/q recurring revenue growth vs. PCTY's 4.5% in Q2 '23, and the quarter saw stable employment trends that should support retention (165k average monthly job adds in US in calendar Q4). However, we see more risk to 2H as revenue guidance implies a ~2% acceleration in 2H in order to meet PCTY’s FY target, from expected Q2 recurring growth of ~16.5-17% y/y growth. Guidance for float revenue assumes 435bps in float yield versus 450bps in Q1, which could be slightly conservative and drive marginal upside to total revenue. We note the company is in its peak selling season as January starts and has added multiple new products to its portfolio, and hence will have more visibility into 2H 2024 on the Q2 earnings call. Given this and our view of moderating demand in the HCM space (see HR Tech Highlights Competitive Industry, Signs of Moderating Demand, 10/16/23), we would not be surprised if management would prefer more cushion in the FY guide and reiterate guidance even in the event of a modest beat, and we see more neutral to downside risk to FY expectations. Management has done well in driving margins higher with ex-float GM expansion and cost discipline, though we see potential for a slightly smaller adj. EBITDA margin beat in Q2 vs. PCTY's 2.4 percentage point four-quarter average as float revenue comps get tougher and PCTY's revenue growth converges closer to its high-teens sales rep headcount growth. Hence, we see this as a steady quarter but see the limited upside potential to FY estimates and margins leading to a more muted reaction given mixed industry sentiment. We maintain our Equal Weight rating.

FIGURE 19. **Barclays Research vs. Consensus Estimates - Paylocity**

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
FYE June 30th	2Q24E	2Q24E		3Q24E	3Q24E	
Recurring & Other Revenue	299.0	298.6	0%	370.7	371.2	(0)%
y/y growth	16.6%	16.4%		18.0%	18.1%	
Interest Income on Funds Held	26.5	26.3	1%	30.4	28.4	7%
y/y growth	60.1%	58.8%		18.3%	10.5%	
Total Revenue	325.5	324.6	0%	401.1	400.5	0%
y/y growth	19.2%	18.9%		18.0%	17.8%	
Gross profit, non-GAAP	237.6	236.6	0%	305.6	301.9	1%
% margin	73.0%	72.9%		76.2%	75.4%	
Operating profit, adjusted	84.2	85.5	(2)%	137.2	137.1	0%
% margin	25.9%	26.3%		34.2%	34.2%	
EBITDA, adjusted	101.7	101.9	(0)%	157.2	154.6	2%
% margin	31.3%	31.4%		39.2%	38.6%	
Net income, adjusted	74.1	73.2	1%	120.7	113.7	6%
EPS, adjusted	1.30	1.28	1%	2.10	1.97	7%
Operating Cash Flow	62.3	75.9	(18)%	142.8	146.1	(2)%
% margin	19.1%	23.4%		35.6%	36.5%	

Source: Barclays Research Estimates, Bloomberg for consensus.

Pegasystems (EW/POS, PT $52) - Commentary on FCF Acceleration Likely to Drive Long-Term Story

PEGA's ACV growth y/y should be toward the lower end of its initial guidance range (11%-13% growth y/y) but above expectations, which have been talked down, so a small beat is possible here. Differently, Client Cloud revenue (47% of total revenue last quarter) had 42% growth y/y in 4Q22, which sets up a tough comparison for 4Q23. Although a beat on revenue may be difficult to achieve, long-term investors are more likely to be interested in FCF guidance for 2024, which should impact the stock the most, given that margin contributes more than growth for PEGA in trending to a Rule of ~35%. Right now, we think FCF consensus expectations are too low for 2024, projecting $270mn FCF on $1,487mn total revenue, for a FCF Margin of 18%. PEGA has already signaled that they expect a mid-to-high twenties FCF margin. After guiding for 2024, estimates should be corrected and brought up, giving confidence to the long-term FCF acceleration story.

FIGURE 20. Barclays Research vs. Consensus Estimates - Pegasystems

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23	4Q23		1Q24	1Q24	
Total ACV	1,250.2			1,311.3		
Subscription (Cloud + Term)	354.1	359.7	(2)%	334.2	305.5	9%
Pega Cloud (SaaS)	124.3	126.2	(1)%	129.3	132.7	(3)%
Client Cloud (Term + Maintenance)	229.8	233.5	(2)%	204.9	172.9	19%
Perpetual License	0.1	0.7	nm	0.1	0.6	nm
Consulting	56.6	58.4	(3)%	54.6	53.8	1%
Total Revenue	410.8	415.3	(1)%	388.9	359.0	8%
Gross Profit, Non-GAAP	324.3	323.7	0%	302.5	279.3	8%
% margin	78.9%	77.9%		77.8%	77.8%	
Operating profit, Non-GAAP	98.4	100.6	nm	87.1	59.4	nm
% margin	23.9%	24.2%		22.4%	16.6%	
Net income, Non-GAAP	83.4	84.1	nm	72.6	48.2	nm
Non-GAAP EPS	0.97	0.97	nm	0.84	0.57	nm
Adjusted FCF	76.8	69.3	nm	89.1	64.9	nm
% margin	18.7%	16.7%	nm	22.9%	18.1%	nm

Source: Barclays Research estimates, Bloomberg consensus

ServiceNow (OW/POS, PT $870) - FX Helps Optics, Pro Plus SKU Commentary the X-Factor with '24 Margin Targets Largely Known

We see limited upside following Q4 results in itself as shares have outperformed meaningfully since last print (NOW +42% vs. IGV +27%) and we see minimal changes to FY24 Street estimates with existing FY24 guidance from NOW's Analyst Day. The demand backdrop seems to remain constructive with our 2H23 CIO Survey showing the largest positive increase in CIO spending expectations for ITSM across 11 software categories (see Barclays 2H23 CIO Survey, 10/9/23). Hence, we expect NOW to deliver another solid quarter and note FX tailwinds (~0.7 and ~1.0% est. tailwind on cRPO and sub rev, respectively) should help reported cRPO optically as Q4 guidance originally contemplated a ~50bps FX headwind on cRPO growth. Consensus is modeling ~12.6% q/q cRPO growth vs. NOW's 16.0% 3-year Q4 average, which taken into consideration with ~1pt y/y growth headwind from NOW's large federal cohort with more 1-year contracts, could lead NOW to deliver closer to 22% cc CRPO growth, or a ~1.8% beat vs. consensus considering FX. We see this as a solid outcome though think the buyside expectations are around this level to slightly higher, and we note management has discussed the cRPO growth headwind from federal will increase to ~2% y/y as NOW approaches the large Q3 '24 federal renewal quarter (headwind alleviates in Q3 upon renewal). We see this limiting upside to consensus' 1Q24 cRPO growth estimate of 20%. Consensus is modeling $10.486bn in FY24 subscription revenue compared to NOW's $10.4bn guide given in May. With elevated investor expectations from NOW's perceived AI benefit, management will likely need to raise FY24 sub rev guidance to $10.5bn, with reiterated guidance a small negative, in our view.

Turning to margins, there will likely be minimal revisions to current Street estimates as NOW previously issued guidance for 28% non-GAAP OM and 31% FCF margin during its May Analyst Day. Overall, with minimal estimate revision potential, we see a range-bound reaction post Q4 results, though we note better than expected commentary on Pro Plus adoption could be a catalyst to shares. We continue to like NOW's optionality around its growing portfolio and up-sell potential with its gen AI SKUs. increase our PT to $870 (from $765) based on 45x EV/CY25E FCF of $4.04bn (from 40x) and largely unchanged estimates to better reflect peer group valuation trends.

FIGURE 21. Barclays Research vs. Consensus Estimates - ServiceNow

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23E	4Q23E		1Q24E	1Q24E	
cRPO	8,355.8	8,364.4	(0)%	8,412.0	8,411.9	0%
y/y growth	20.4%	20.5%		20.0%	20.0%	
y/y growth (cc)	21.2%	21.2%		21.1%	20.7%	
Total RPO	17,255.0	17,045.3	1%	16,800.0	17,000.3	(1)%
y/y growth	23.3%	21.8%		20.0%	21.4%	
Billings	3,759.4	3,660.8	3%	2,633.9	2,593.8	2%
Subscription Revenue	2,322.2	2,324.9	(0)%	2,489.1	2,462.7	1%
y/y growth	24.8%	33.5%		23.0%	32.4%	
Services Revenue	79.2	76.6	3%	79.2	76.9	3%
Total Revenue	2,401.4	2,401.8	(0)%	2,568.3	2,542.8	1%
y/y growth	23.8%	31.2%		22.5%	31.1%	
Non-GAAP Gross Profit	1,936.8	1,936.9	(0)%	2,090.6	2,082.2	0%
% margin	80.7%	80.6%	0%	81.4%	81.9%	(1)%
Non-GAAP Operating Income	659.3	662.3	(0)%	703.7	688.8	2%
% margin	27.5%	27.6%	(0)%	27.4%	27.1%	1%
Non-GAAP Net Income	587.5	578.8	2%	615.6	600.1	3%
Non-GAAP EPS	2.84	2.79	2%	2.96	2.89	2%

Source: Company data, Barclays Research, Bloomberg for consensus.

Sprout Social (OW/POS, PT $75) - Continuing to Turn the Corner

In our recent outlook (U.S. Software: 2024 Outlook: Putting Both AI and SMID Cap Hype to the Test, 1/12/24), we called out Sprout as one of very few promising SMid cap plays for 2024, and think the story is set in motion in Q1. After a 1H plagued by low end churn dragging retention and ARR, the company was able to turn the corner in Q3 with a 3% ARR beat, and we expect that momentum to continue. The low end churn was prompted by strategic actions to further pivot upmarket, and we expect a strong quarter for Social Studio adds in Q4 to be evidence of this playing out well. Looking ahead, the company is slated to lap very easy comps in 1H24 (low end churn most prevalent), and benefits from the end of life from Social Studio. We think both of these should mean an ARR acceleration that is not reflected in consensus currently, and hence gives the company room to beat on the FY guide if it chooses to. At ~6x CY25E Sales (only in-line with SaaS overall), we view valuation as allowing for a positive move post a strong print.

- **Room to Beat in Q4:** We see the Q4 setup for Sprout as achievable, which primes the company for another quarter of returning to its normal beat cadence. Specifically, we take a look at the implied q/q growth rates in consensus compared to the typical historical q/q growth rates in Q4 for ARR, and subscription and total revenues. In all cases, expectations bake in performance of 2-3pts below the historical average, which we view as a sign of room to beat mechanically. Part of what is driving this is the commentary for the removal of the remaining ~5k lowend customers in the guidance, which although prudent, seems unlikely. Hence, even without the positive drivers upmarket (discussed next), we see room to beat a conservative setup, which should be viewed as another step in the right direction.

- **Upmarket Momentum Visible in Strong Studio Adds:** Sprout has made strides upmarket as evidenced by avg ACV per customer growing +40% y/y in Q3. While changes here prompted some of the churn last year, we expect them to continue to pay dividends. Part of the upmarket strategy, of course, includes Salesforce and the sunsetting of Social Studio. Our checks validate signs pointing to a strong Social Studio quarter, as hinted by management already. We expect the net adds number to top both last Q4's 175 and last quarter's 176. Using an ACV assumption of $25k, we can see at least a ~$5mn benefit to ARR. This is without factoring in the benefit from these deals likely being larger on average than prior quarters. It is important to remember that success in Social Studio serves as a reference point for other enterprise vendors, in the broader Salesforce ecosystem and beyond. With Tagger also adding to the enterprise push, bulls see this as a broader flywheel effect, hence the Social Studio performance should be monitored closely.

- **Ability to Be Aggressive on Guide:** We see room to raise the bar higher, especially on ARR, if management chooses to do so. For FY24 ARR, the Street is modeling 28.4% y/y growth, which would mark a deceleration from the 29% projected for FY23. This comes despite FY23 being impacted by thousands of low end customers churning and FY24 having the benefit of the end of life of Social Studio at year end driving conversions. Management has cited ~60% of the Social Studio opportunity still remains due to convert and our math conservatively suggests a ~$22mn benefit to ARR from inception to the end FY23, hinting at a sizable chunk left for FY24. The question becomes whether management decides to guide to ARR, as it does not usually but did last year. From our conversations, most investors are not expecting guidance, but note there could be reasons for the company to guide given the factors discussed above (and even M&A driven ones). If ARR growth is guided, we see plenty of room to beat the Street and, more importantly, still walk higher thereafter.

FIGURE 22. Barclays Research vs. Consensus Estimates - Sprout Social

$, mn	Barclays 4Q 23	Consensus 4Q 23	Difference vs. cons.	Barclays 1Q 24	Consensus 1Q 24	Difference vs. cons.
ARR	384.5	382.6	0%	402.1	399.0	1%
% y/y growth	29.6%	29.0%		29.8%	28.8%	
Subscription Revenue	90.1	90.2	(0)%	98.7	96.7	2%
% y/y growth	30.2%	30.4%		32.1%	29.4%	
Total Revenue	90.5	90.6	(0)%	99.2	97.3	2%
% y/y growth	30.0%	30.0%		31.9%	29.4%	
Gross profit, non-GAAP	71.4	69.9	2%	77.8	75.9	2%
% margin	78.8%	77.2%		78.4%	78.0%	
Operating profit, adjusted	0.7	0.7	(1)%	2.4	2.1	14%
% margin	0.7%	0.7%		2.4%	2.1%	
Net income, adjusted	0.4	0.2	nm	1.7	(0.4)	nm
EPS, adjusted	0.01	0.01	nm	0.03	0.03	nm

Source: Barclays Research estimates, Bloomberg consensus

Teradata (UW/POS, PT $46) - Expectations Lowered on Public Cloud De-Risks Large Q4 Needed

We have written about how Teradata's FY guidance and performance throughout the year may be leading to a seasonally larger Q4 than what TDC typically delivers, creating a potentially big event for shares in Q4. However, TDC noted during our December conference that corporate actions at one large customer may cause a delay in the signing of an 8-figure cloud deal, and hence it could deliver toward the low-end or slightly miss its FY23 public cloud ARR guide (see Global Technology Conference Day 2 Takeaways, 12/8/23). The deal is still in the pipeline and it was not a competitive situation, though shares have underperformed the IGV by 4.1% since the statement; hence, we believe this takes away some of the downside risk to shares in the quarter. TDC expected to deliver toward the low end of its FY ARR and recurring revenue guidance due to current FX estimates, which have since turned more favorable, and we estimate a 0.5% y/y FX tailwind to ARR and ~0.9% to recurring revenue, which could improve reported optics and result in TDC delivering toward the midpoint of guidance.

Investors will likely be focused on Q4 cash flow and guidance as TDC needs to deliver $151mn in OCF to meet the midpoint of its $340-380mn guide, which implies significant seasonality (46%) compared to 31% seasonality in Q4 '22 and 21% in Q4 '21. In our view, this still seems like a large add, though we expect TDC to deliver toward the low end of the guidance range and see the potential risk of missing as low given management's confidence around collections during our conference fireside with the CFO. Looking to cash flow guidance, consensus is modeling 20% FCF margin in FY24, which while implies ~2pt expansion y/y, seems fairly safe as TDC demonstrated 22-24% FCF margins in FY21-22. Overall, we expect a mixed print but think investors are aware of the situation and therefore see a limited reaction. We maintain our Underweight rating.

FIGURE 23. Barclays Research vs. Consensus Estimates - Teradata

$, mn	Barclays	Consensus	Difference	Barclays	Consensus	Difference
	4Q23E	4Q23E		1Q24E	1Q24E	
Total ARR	1,583.4	1,578.9	0.3%	1,603.2	1,616.4	(0.8)%
y/y growth	6.8%	6.5%		6.5%	7.3%	
Recurring	375.4	371.2	1.1%	413.8	409.8	1.0%
Perpetual & Hardware	9.4	9.5	(1.5)%	2.6	7.1	(63.5)%
Consulting Services	76.4	74.3	2.9%	71.0	70.5	0.8%
Total Revenue, Non-GAAP	461.2	458.5	0.6%	487.5	488.5	(0.2)%
y/y growth	2.0%	1.4%		2.4%	2.6%	
Gross profit, non-GAAP	282.7	279.6	1.1%	317.9	311.1	2.2%
% margin	61.3%	61.0%		65.2%	63.7%	
Operating profit, adjusted	80.9	78.8	2.6%	112.0	109.0	2.7%
% margin	17.5%	17.2%		23.0%	22.3%	
Net income, adjusted	51.7	51.8	(0.1)%	75.0	72.4	3.5%
EPS, adjusted	0.51	0.51	(0.0)%	0.75	0.72	3.5%
Free Cash Flow	143.5	145.8	(1.6)%	111.4	111.3	0.1%

Source: Barclays Research, Company data, Bloomberg for consensus.

WalkMe (UW/POS, PT $10) - Headwinds on Existing Customer Expansion Likely to Continue

We continue to remain cautious on WKME as the company's partial seat based model will continue to face headwinds from less hiring amongst the customer base, in our view. Combined with less app expansion, we expect the >500 employee NRR to continue to deteriorate (104% in 3Q23 vs. 109% in 2Q23). We are also concerned that the company's core offering is not viewed as relatively mission critical by CIOs and as such may be de-prioritized in this macro to allow for spending on more necessary areas of the software stack (see U.S. Software: 2024 Outlook: Putting Both AI and SMID Cap Hype to the Test for downgrade, 1/12/24). While consensus implied Q4 q/q revenue growth of ~1% does not look overly difficult to achieve, we still do not see a lot of upside with fundamental headwinds impacting the company. For FY24, we think the consensus implied ~8% y/y total revenue growth is in-line with where the company will set the initial guide, but this level of growth will not get investors excited, given where the company is on the maturity curve. With that, we recommend investors stay on the sidelines and view WKME as a wait-and-see story until there are signs of a top-line growth re-acceleration.

FIGURE 24. Barclays Research vs. Consensus Estimates - WalkMe

$, mn	Barclays 4Q23	Consensus 4Q23	Difference vs. cons.	Barclays 1Q24	Consensus 1Q24	Difference vs. cons.
Ending ARR	278.1	278.9	(0.3%)	282.3	282.4	(0.0%)
Total Revenue	67.4	67.5	(0.1%)	70.8	69.3	2.2%
Operating Profit, adj.	2.0	1.9	nm	3.4	0.5	nm
% margin	3.0%	2.9%		4.8%	0.8%	
Free Cash Flow	9.1	4.6	nm	7.1	3.1	nm
% margin	13.5%	6.8%		10.0%	4.4%	
Non-GAAP EPS	0.05	0.03	nm	0.05	0.00	nm

Source: Barclays Research estimates, Bloomberg consensus

ZoomInfo (EW/POS, PT $18) - Searching for Signs of Recovery

We think Q4 for ZI will largely center around the credibility of commentary surrounding the timeline for recovery in the business. True, the setup for -1.1% days adjusted q/q growth (vs +0.06% in Q3) seems to be factoring in a worsening macro already, but days adjusted q/q growth has decelerated in each of the past seven quarters. Therefore, we view the setup as certainly achievable against historical averages, but we are still in a period of unprecedented uncertainty for the business. In the Q3 call, management pointed to March of 2024 as an important date in the recovery timeline as 90% of the business will have had a renewal since the seat pressures began. Hence, guidance will be a major point of focus for quarter, as it could help frame the timing and pace of recovery. Easing comps, new use cases, and of course a general macro recovery can present upside in the FY24 guide, but compounding cuts and incremental layoffs can limit this. We see the consensus numbers modeling 3.4% y/y growth in FY24 as undemanding assuming better retention dynamics, but also flag this is higher than the commentary for the range of possibilities for days adj q/q in FY24 to match those seen in FY23. We would need to see some concrete data points on the recovery timing before becoming more constructive and are unsure if those are in store for Q4.

FIGURE 25. Barclays Research vs. Consensus Estimates - ZoomInfo

$, mn	Barclays 4Q 23	Consensus 4Q 23	Difference	Barclays 1Q 24	Consensus 1Q 24	Difference
Total Revenue	310.4	310.4	0%	306.0	310.8	(2)%
% y/y growth	2.8%	2.8%		1.7%	3.0%	
Gross profit, non-GAAP	277.8	277.6	0%	273.9	278.0	(1)%
% margin	89.5%	89.5%		89.5%	89.5%	
Operating Profit, non-GAAP	123.3	123.3	0%	121.3	120.8	0%
% margin	39.7%	39.7%		39.7%	38.9%	
Net income, adj.	102.8	97.0	6%	100.3	95.4	5%
EPS, adj.	0.25	0.25	2%	0.25	0.24	3%

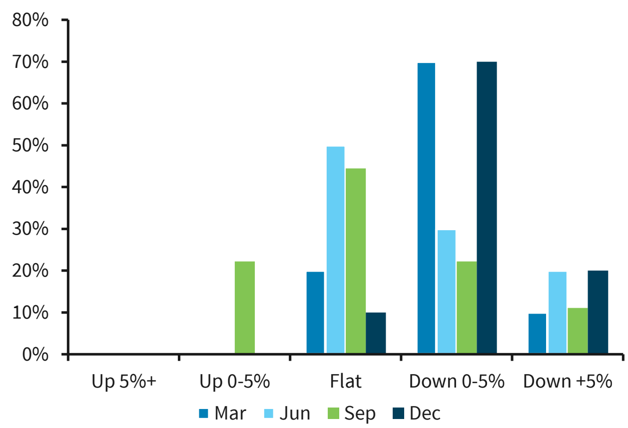
Source: Barclays Research estimates, Bloomberg consensus

VAR Survey

Macro: Near-Term Outlook Worsens, But Long-Terms Shows Signs of Life

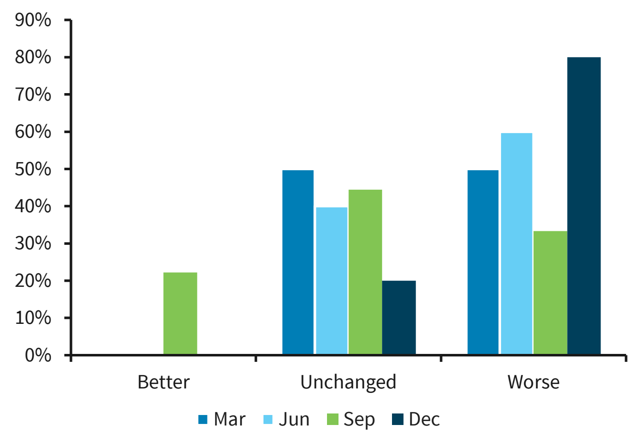
All partners were asked the same top-down-related questions, and we have aggregated the responses in the charts below. The first question asks how general software spending was over the past three months on a y/y growth basis (Figure 26). Data for the December quarter revealed the demand environment has deteriorated, with no respondents citing growth (vs. 22% last quarter, which was the first since December 2022). 10% of respondents indicated flat trends (vs. 44% last quarter), and 70% pointed to a decline in spending (vs. 22% last quarter - 70% was the highest reading since March of 2023). Important to also highlight is 20% pointed to declines greater than 5% (vs. 11% in the prior quarter), which was slightly worrying to see.

FIGURE 26. How was software spending, y/y, over the past 3 months?



Source: Barclays Research

FIGURE 27. How does the current quarter compare to the prior quarter?

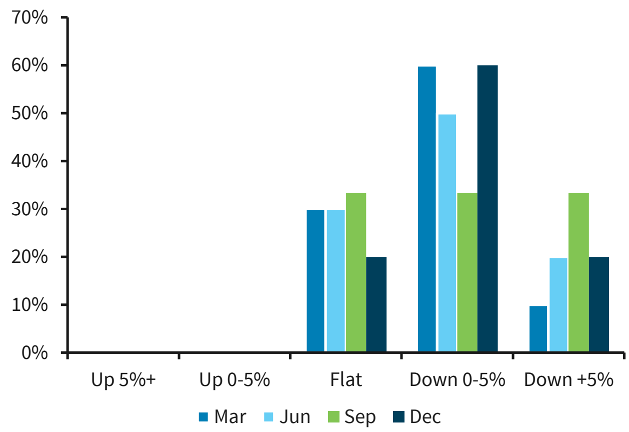


Source: Barclays Research

We also asked resellers the rate at which they expect software spending to grow, on a y/y basis, over the next three months (Figure 28 below). The short-term spending outlook was slightly better than the most recent quarter, though not by much. None of the respondents expect any growth (same as last six quarters) and 20% of respondents expect flat trends (vs. 33% last quarter). Important, however, was that the expected magnitude of the declines was less severe. 60% of vendors are expecting a decline of 0-5% (vs. 33% last quarter), but only 20% of respondents expect a decline of +5% (vs. 33% last quarter), potentially indicating software spending trends may have started to find a bottom.

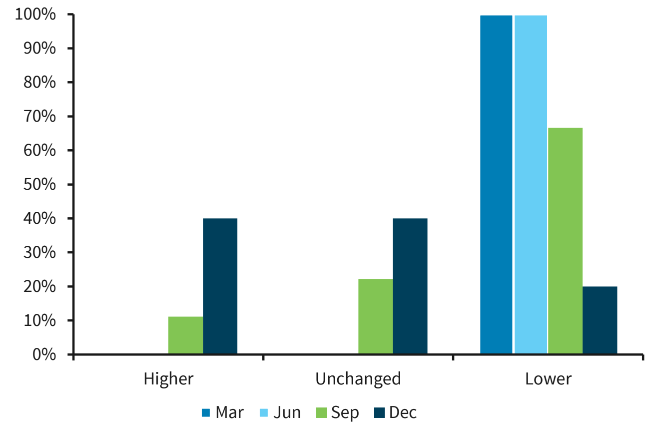
Additionally, we asked the direction that software spending could move over the next 12 months (Figure 29). Results were better here once again, with 40% of VARs pointing to higher spending (vs. 11% last quarter). Another 40% of VARs said they expected spending to remain unchanged (vs. 22% last quarter), while only 20% said they expected spending to get worse still. This was the second quarter of positive trends following five straight quarters where none of the VARs expected better spending over the next 12 months.

FIGURE 28. What is software spending, y/y, expected to be over the next 3 months?



Source: Barclays Research

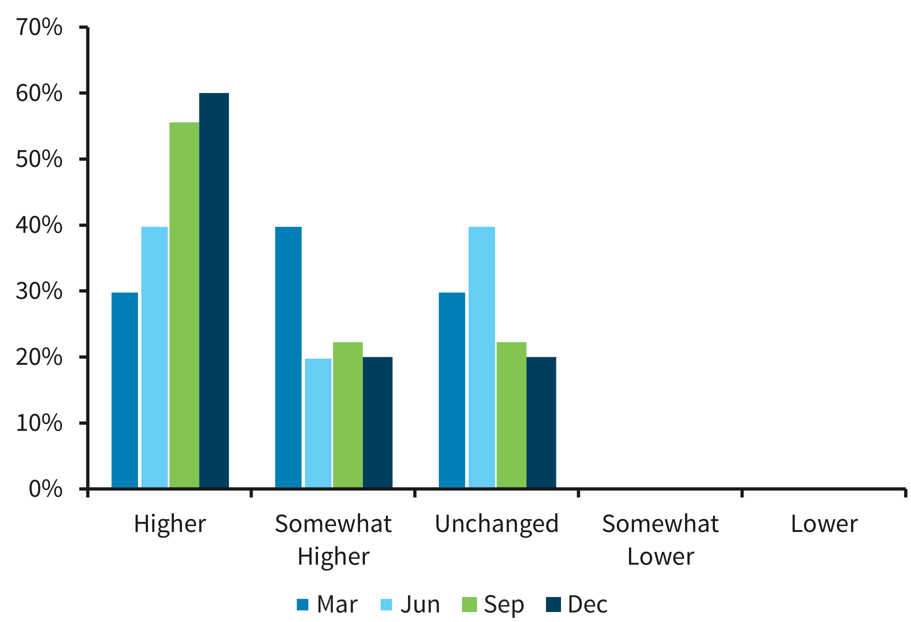
FIGURE 29. In what direction could software spending more likely move over the next 12 months due to the economy/confidence?



Source: Barclays Research

Last, we asked respondents about deal scrutiny, which has picked up and remained elevated during the period of cloud optimizations and longer sales cycles. Respondents were asked how they would rate the level of extra scrutiny/CFO involvement in deals in the quarter relative to the previous one. There was again a slightly higher degree of deal scrutiny and CFO involvement in the December quarter, with 80% of respondents citing somewhat higher or higher involvement (vs. 78% in the prior quarter). No one noted lower level of deal scrutiny or CFO involvement this quarter, consistent with the prior five quarters.

FIGURE 30. What is the level of extra scrutiny/CFO involvement in deals in the quarter relative to the previous one?

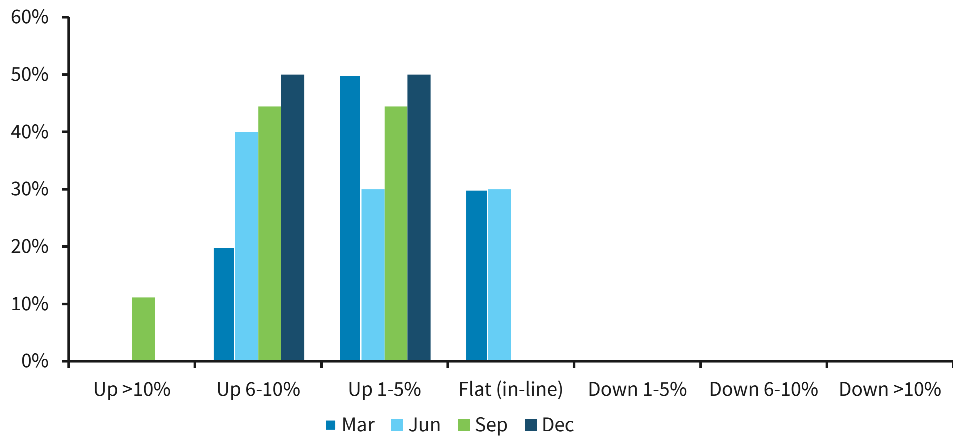


Source: Barclays Research

Microsoft: Strong FYQ2 Balanced Out by Potential Upcoming Headwinds

We received responses from nine Microsoft partners that generate around $1.4bn of Microsoft-related revenue on an annual basis. The first question we asked VARs was how performance compared relative to their internal expectations or plan. The responses show average outperformance of 5.0% compared to 5.8% in our September survey (and vs. 4.1% in December of 2022). We are encouraged by the step-up here, as the level of outperformance remains high, with this being the strongest December in two years.

FIGURE 31. How did your Microsoft business perform in the current quarter vs. expectations?

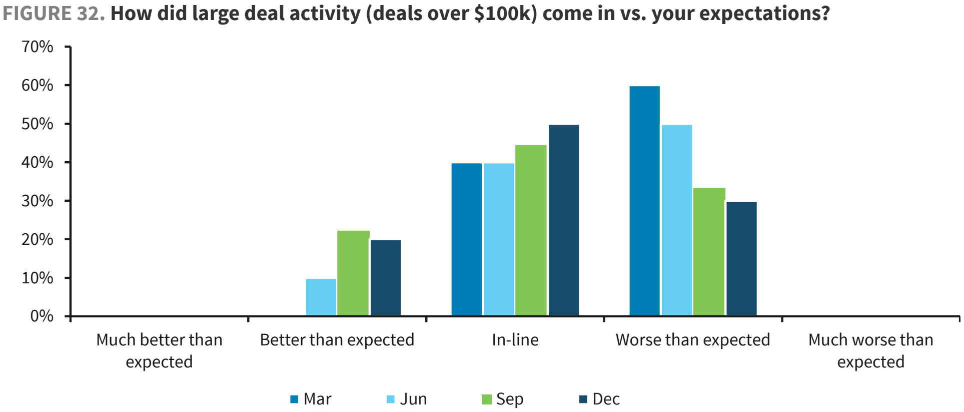


Source: Barclays Research

Before proceeding to the next question, we'd also refer back to the macro section to the question pertaining to the level of CFO scrutiny in deals, as this has come up as a major theme throughout software as we enter a measured buying environment. Here, we see that the level of CFO involvement in deals continues to trend higher as 80% of resellers indicate more scrutiny compared to an already elevated level last quarter. We will continue to monitor this metric going forward as this is particularly relevant for Microsoft given its large deal sizes.

We followed up with a question targeting large deals versus expectations. Of the VARs surveyed, results were roughly in-line with last quarter, with none seeing much-better-than-expected large deal activity (same as past eight quarters), and 20% of VARs seeing better-than-expected activity. 30% saw worse-than-expected activity (vs. 33% in September) which remains below the average in the preceding three quarters, and none saw much-worse-than-expected.

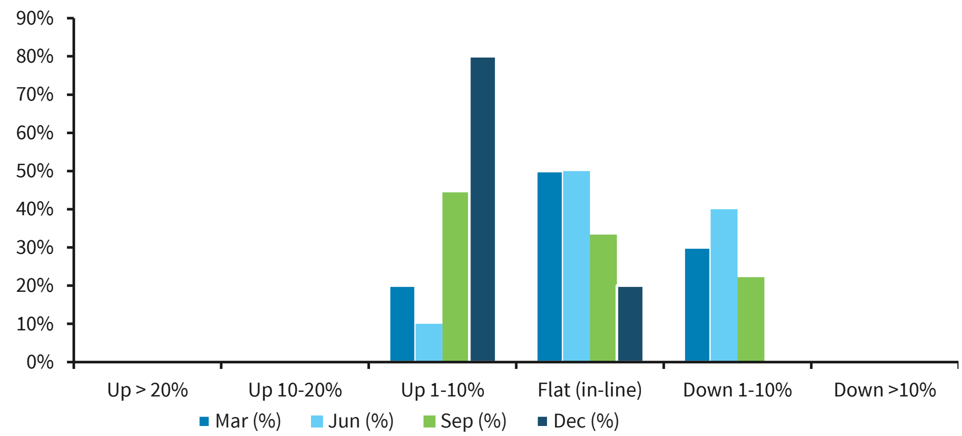
FIGURE 32. How did large deal activity (deals over $100k) come in vs. your expectations?



Source: Barclays Research

Next, we asked resellers what the growth of their Microsoft business was over the prior three months, and what they expect growth to be for the next three months. In the quarter, no resellers saw growth 'up >20%' or 'up 10-20%' (same as past six quarters), though those seeing a decline in general contracted to 0% (vs. 22% last quarter). Overall, 80% of VARs saw business 'up 1-10%' (vs. 44% last quarter), a notable improvement that we believe demonstrates stabilization in the business. The remaining 20% saw flat growth (vs. 33% in the September survey). On a sequential basis, 70% of resellers saw growth 'up 1-10%' (vs 55% last quarter), and no resellers saw a decline (same as last quarter). We are encouraged by the improvement in sequential trends for the past three quarters now.

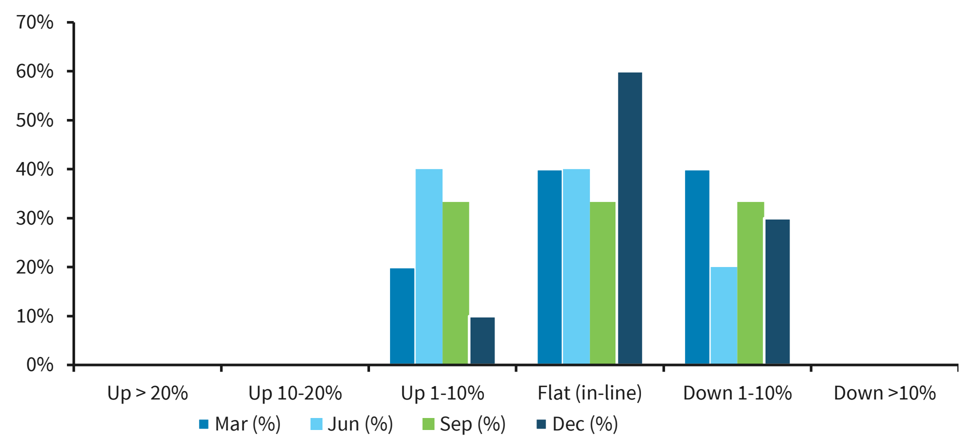
FIGURE 33. **What was Microsoft's overall growth, y/y, for the prior 3 months?**



Source: Barclays Research

Expectations for the coming quarter, however, continue to be more pessimistic. Only 10% of resellers are looking for growth on a y/y basis (vs. 33% last quarter and 25% last December), and none are looking for >20% growth (same as the past six quarters). The percentage of resellers expecting a decline remained consistent, with 30% of resellers forecasting this (vs. 33% in the September survey). As we further lap optimizations from last year, we anticipate our checks to begin to inflect more positively as businesses recover from cost cutting measures, and begin to more profoundly implement their 2024 IT budgets.

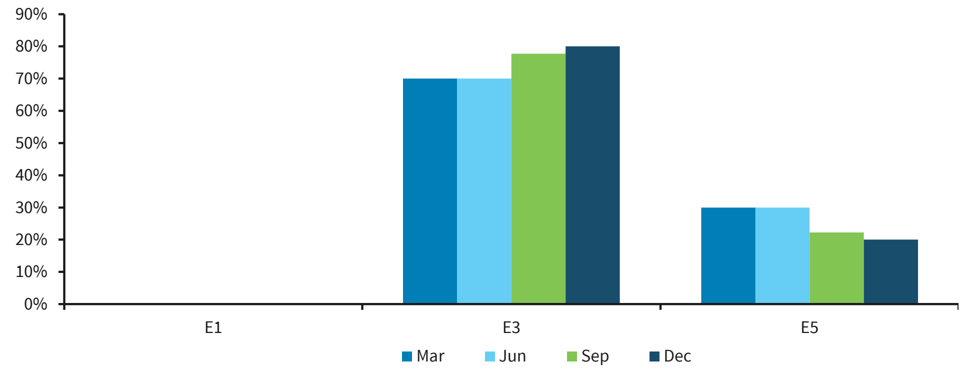
FIGURE 34. **What is your Microsoft-related expected revenue growth, y/y, for next 3 months?**



Source: Barclays Research

ASPs continue to be an important part of the Office 365 story, particularly with the roll out of M365 Copilot, which became GA on November 1, 2023. Therefore, we asked resellers about interest in the various Office 365 SKUs, as E3 and E5 were a prerequesite for Copilot at a period in time. Responses were similar to last quarter, and showed that 100% of respondents were seeing interest in the E3/E5 offerings. E5 interest slightly declined again to 22% this quarter (vs. 20% in September).

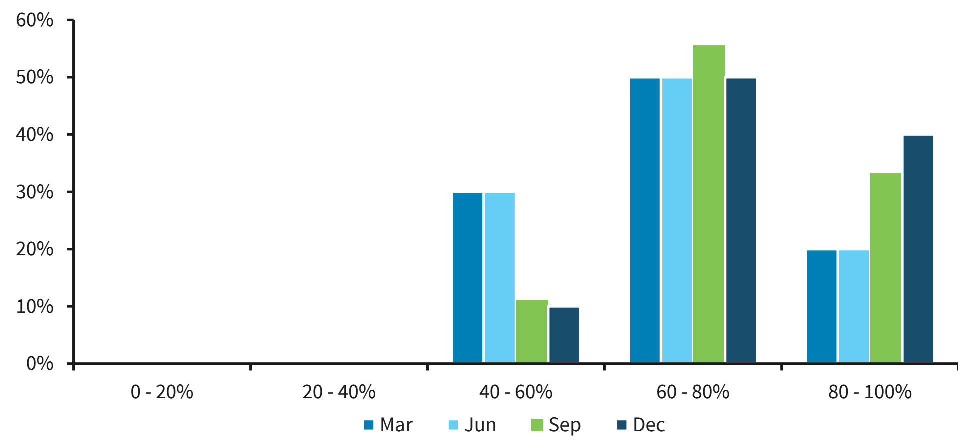
FIGURE 35. Which Office 365 SKUs are you seeing the most customer interest?



Source: Barclays Research

Azure is also a key piece of Microsoft's investment case and investor focus, so we asked partners about adoption and the kinds of workloads that are moving to the cloud. We saw notable improvement here again this quarter, and of the respondents, 90% see 60-100% adoption within the next 12 months (vs. 88% last quarter). Importantly, 80-100% adoption was at its highest level on record since we began tracking this data.

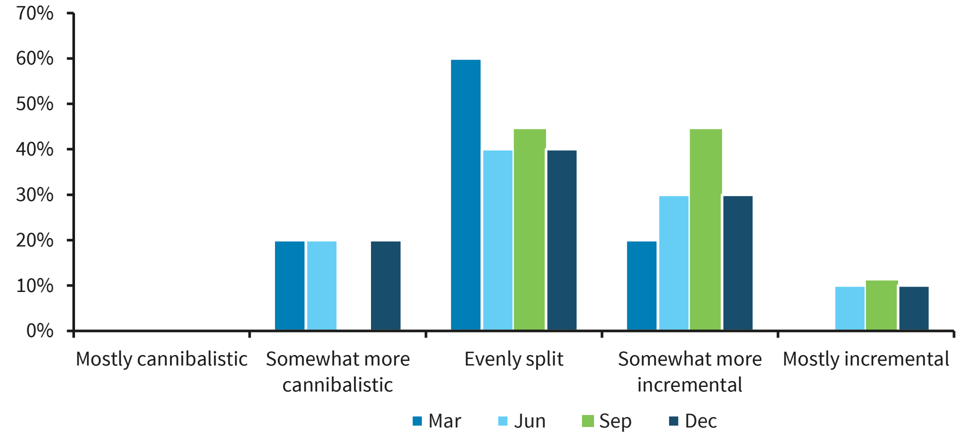
FIGURE 36. How many of your clients are using or planning on using Azure within the next 12 months?



Source: Barclays Research

Microsoft has described its opportunity for Azure as incremental to its existing server tools business, unlike Office 365, which is a straight replacement. Results here declined this quarter, with 40% of respondents citing 'somewhat incremental' or 'mostly incremental' (vs. 55% last quarter). Respondents again cited workloads as being cannibalistic (vs. 0% last quarter, the first time on record), which we believe could be driven by AI workloads cannibalizing other projects.

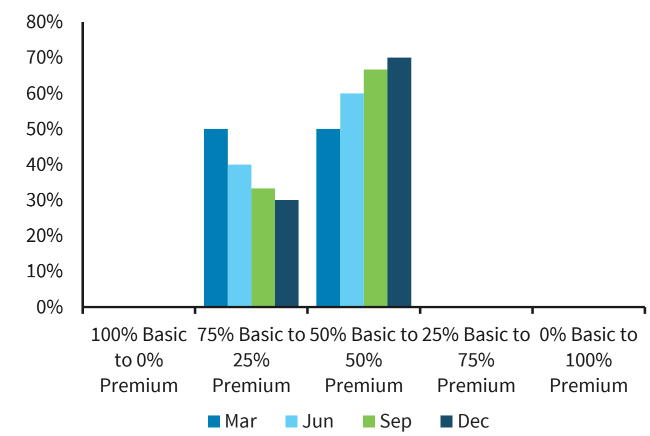
FIGURE 37. Of the workloads you see moving to Azure, how many are incremental Microsoft workloads versus cannibalistic of existing Microsoft on-prem workloads?



Source: Barclays Research

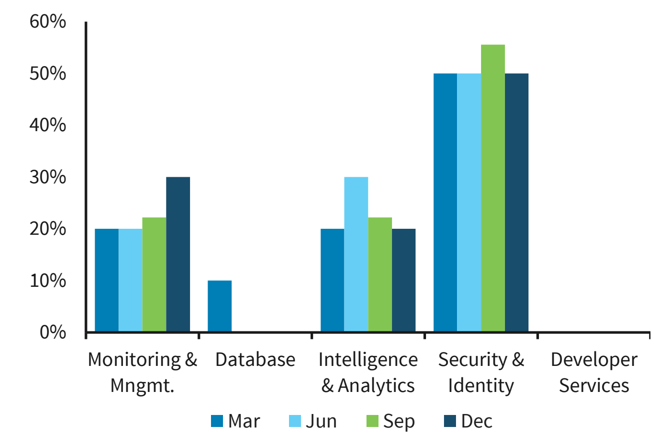
We asked respondents about the mix of spend between basic and premium services on Azure and what type of premium services customers are interested in. This is an important metric to track as premium services will have a large impact on commercial cloud margins, which is a main focus for Microsoft, and Azure AI workloads are likely to show up here as well. 70% of respondents are seeing 50% or higher premium mix of services (vs. 67% last quarter and 60% the quarter before). The most popular premium services continue to center around security and monitoring, which we see as more resilient spending buckets heading into a downturn due to their mission-critical nature.

FIGURE 38. Of your clients that are using Azure, what is the percentage split between spend on Basic and Premium Services?



Source: Barclays Research

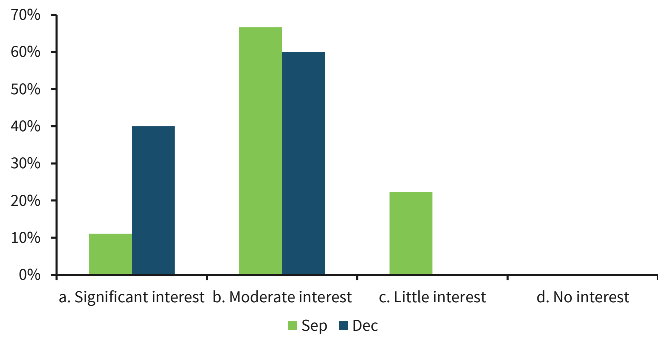
FIGURE 39. In which of Azure's Premium Services are you seeing the most interest from customers?



Source: Barclays Research

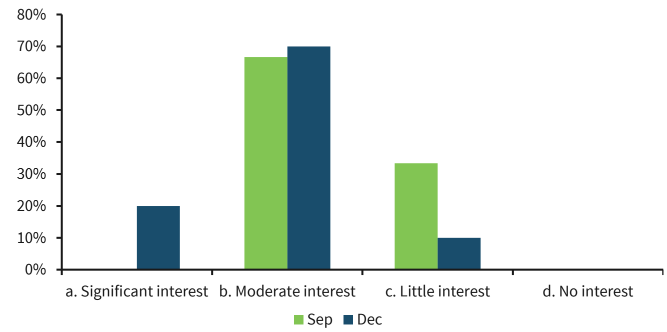
Our next two questions remain relatively new to the survey this quarter, and look to provide insight into the demand environment for Microsoft AI services. Following the general release of Azure OpenAI service to customers earlier this year, and with M365 Copilot having become generally available for E3/E5 and business premium SKUs on November 1, we asked VARs about customer interest in each of these two offerings. 100% of VARs reported moderate to high interest in Azure OpenAI service, while 90% reported moderate to significant interest in M365 Copilot, both improvements vs. last quarter. We look to monitor both of these trends further, particularly with M365 Copilot having become generally available during the past quarter.

FIGURE 40. How much interest have you seen from MSFT customers to adopt Azure OpenAI Service?



Source: Barclays Research

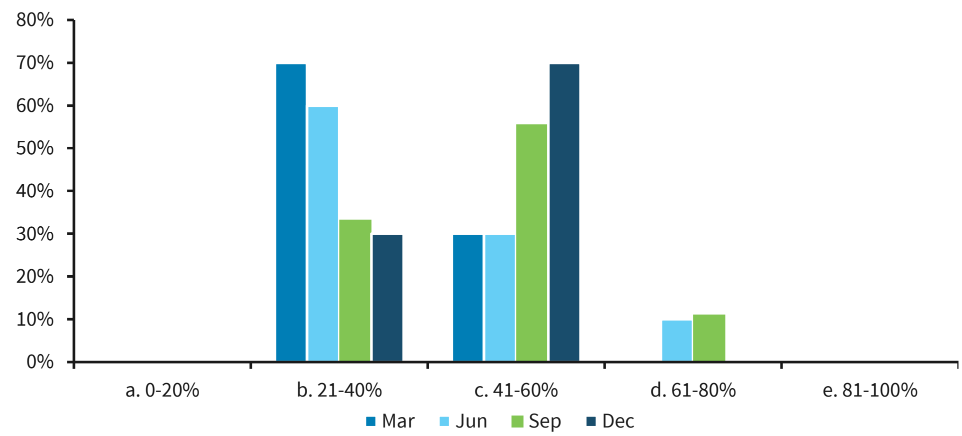
FIGURE 41. How much interest have you seen from MSFT customers to adopt Microsoft 365 Copilot?



Source: Barclays Research

Microsoft continues to report EMS seat growth within Azure, and we continue asking respondents what the penetration levels for EMS are in their customer base. 100% of respondents said penetration is 21-60% (vs. 90% last quarter), with no VARs citing 61-80% penetration.

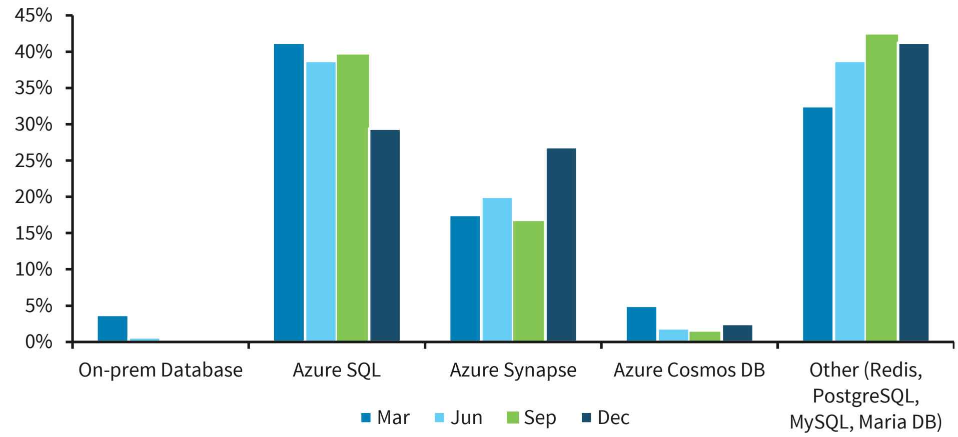
FIGURE 42. What is the penetration level of EMS (Enterprise Mobility & Security) in your customer base?



Source: Barclays Research

We also asked VARs to rank which DBs were of the most interest to clients. Interestingly, Azure SQL saw a step-down this quarter while Azure Synapse saw a healthy inflection upward, which we believe could be due to the traction Microsoft continues to gain with Fabric. We also note that the other non-Microsoft native DBs continued to outpace Microsoft DBs in interest this quarter. We will continue to monitor this trend going forward.

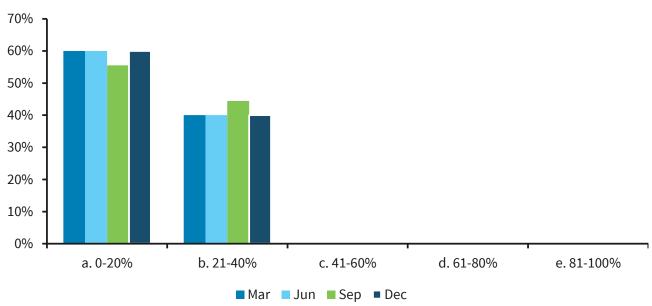
FIGURE 43. Which databases are customers showing most interest in?



Source: Barclays Research

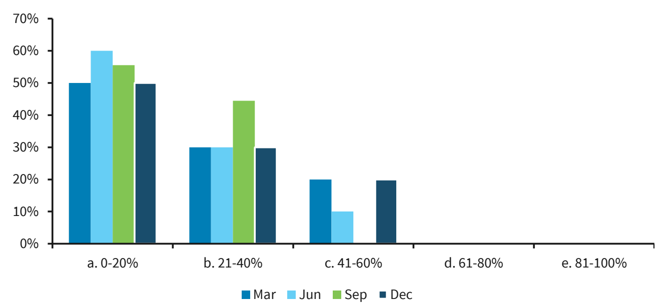
Finally, we asked VARs two questions relating to Teams voice interest, an important part of future growth for Teams and the E3/E5 SKUs. We note the positive outlook on the opportunity here as 40% of respondents indicated >20% interest (vs. 44% last quarter), and 80% of respondents saw adoption below 40% (vs. 100% last quarter). We will continue to monitor trends here.

FIGURE 44. What percentage of Teams clients expressed interest in voice this quarter?



Source: Barclays Research

FIGURE 45. What percentage of Teams clients have adopted the voice functionality of Teams?



Source: Barclays Research

Company Snapshots

U.S. Software **POSITIVE**

Appian Corporation (APPN)

UNDERWEIGHT

Income statement ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Revenue	468	542	632	732	16.1%
EBITDA (adj)	-76	-60	-3	28	N/A
Operating profit (adj)	-83	-74	-37	-6	N/A
Pre-tax income (adj)	-89	-79	-29	2	N/A
Net income (adj)	-89	-80	-30	0	N/A
EPS (adj) ($)	-1.23	-1.09	-0.41	0.00	N/A
Diluted shares (mn)	72.5	73.1	73.5	73.8	0.6%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	-16.2	-11.1	-0.5	3.9	-6.0
Operating margin (adj) (%)	-17.8	-13.6	-5.8	-0.8	-9.5
Pre-tax (adj) margin (%)	-18.9	-14.5	-4.5	0.3	-9.4
Net (adj) margin (%)	-19.1	-14.7	-4.8	0.0	-9.6
ROIC (%)	-100.3	-260.0	-2,610.6	76.2	-723.7
ROA (%)	-25.4	-19.3	-10.4	-6.7	-15.5
ROE (%)	-103.6	-270.5	-2,279.7	616.3	-509.4
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	42	44	48	54	8.7%
Goodwill	0	0	0	0	N/A
Cash and equivalents	148	128	152	137	-2.6%
Total assets	594	671	795	924	15.8%
Short and long-term debt	0	0	0	0	N/A
Other long-term liabilities	0	0	0	0	N/A
Total liabilities	449	623	792	934	27.7%
Net debt/(funds)	-82	-42	0	20	N/A
Shareholders' equity	146	48	4	-10	N/A
Change in working capital	-2	-37	7	-1	N/A
Cash flow from operations	-107	-116	-28	-4	N/A
Capital expenditure	-9	-12	-13	-16	N/A
Free cash flow	-116	-128	-41	-20	N/A
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	N/A	N/A	N/A	N/A	N/A
EV/sales (x)	5.3	4.6	3.9	3.4	4.3
EV/EBITDA (adj) (x)	-32.8	-41.2	-738.9	88.2	-181.2
Equity FCF yield (%)	-4.7	-5.2	-1.7	-0.8	-3.1
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	1.1	0.7	0.1	0.7	0.6
Total debt/capital (%)	0.0	0.0	0.0	0.0	0.0
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Deferred revenue	200	264	360	489	34.7%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 33.78**
Price Target	**USD 35.00**

Why UNDERWEIGHT?

Appian plays in a greenfield market opportunity with its end-to-end process automation platform that leverages its differentiated data fabric technology. However, the current valuation levels are driven by technical factors, and are unjustified given the company's current growth prospects and profitability trajectory.

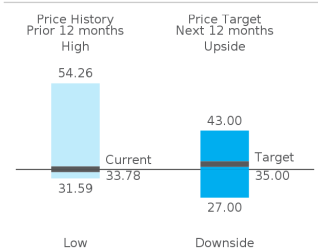
Upside case **USD 43.00**

Upside scenario is based on a 10% premium to our CY25 revenue estimate and a ~4.0x EV/sales multiple.

Downside case **USD 27.00**

Downside scenario is based on a 10% discount to our CY25 revenue estimate and a ~3.0x EV/sales multiple.

Upside/Downside scenarios



U.S. Software | POSITIVE

DigitalOcean (DOCN)

OVERWEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	576	690	789	901	16.1%
EBITDA (adj)	204	272	323	372	22.2%
Operating profit (adj)	102	164	189	228	30.8%
Pre-tax income (adj)	104	186	219	260	35.7%
Net income (adj)	104	154	172	204	25.1%
EPS (adj) ($)	0.88	1.47	1.74	2.13	34.2%
Diluted shares (mn)	118	105	99	96	-6.8%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	35.4	39.4	41.0	41.3	39.3
Operating margin (adj) (%)	17.7	23.8	24.0	25.3	22.7
Pre-tax (adj) margin (%)	18.1	26.9	27.8	28.9	25.4
Net (adj) margin (%)	18.1	22.3	21.8	22.7	21.2
ROIC (%)	6.8	14.3	14.9	16.1	13.0
ROA (%)	5.7	11.1	11.7	12.8	10.3
ROE (%)	204.0	-38.7	-53.6	-96.8	3.7
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	273	283	276	267	-0.8%
Goodwill	N/A	N/A	N/A	N/A	N/A
Cash and equivalents	141	30	133	273	24.7%
Total assets	1,816	1,388	1,469	1,592	-4.3%
Short and long-term debt	1,470	1,476	1,476	1,476	0.1%
Other long-term liabilities	130	124	124	124	-1.7%
Total liabilities	1,765	1,787	1,789	1,803	0.7%
Net debt/(funds)	606	1,141	1,038	899	14.0%
Shareholders' equity	51	-399	-321	-211	N/A
Change in working capital	-14	-35	17	21	N/A
Cash flow from operations	195	207	310	354	22.0%
Capital expenditure	-115	-100	-126	-135	N/A
Free cash flow	75	151	183	219	43.0%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	39.5	23.7	20.0	16.3	24.9
EV/sales (x)	8.6	7.9	6.8	5.8	7.3
EV/EBITDA (adj) (x)	24.2	20.1	16.6	14.0	18.7
Equity FCF yield (%)	-1.3	-0.4	1.2	1.7	0.3
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	3.0	4.2	3.2	2.4	3.2
Total debt/capital (%)	96.6	137.0	127.7	116.7	119.5

Note: FY End Dec

Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 34.85**
Price Target	**USD 43.00**

Why OVERWEIGHT?

DigitalOcean should benefit from long-term cloud migration and digital transformation secular tailwinds, increased focused on customer retention and expansion as the company rolls out and grows it direct sales and partner initiatives, and product rollouts that expand the breadth and depth of its its IaaS and PaaS portfolio.

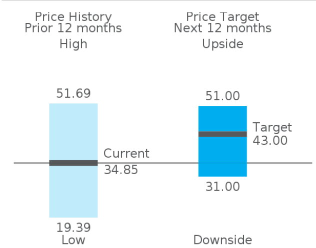
Upside case **USD 51.00**

Our upside case is based on a 10% FCF premium on CY25E FCF and a ~31.0x EV/FCF multiple.

Downside case **USD 31.00**

Our downside case is based on a 10% FCF discount on CY25E FCF and a ~25.0x EV/FCF multiple.

Upside/Downside scenarios



U.S. Software **POSITIVE**

ServiceNow, Inc. (NOW)

OVERWEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	7,245	8,933	10,788	13,014	21.6%
EBITDA (adj)	2,293	3,021	3,754	4,516	25.4%
Operating profit (adj)	1,860	2,431	3,022	3,711	25.9%
Pre-tax income (adj)	1,904	2,666	3,251	3,815	26.1%
Net income (adj)	1,543	2,159	2,617	3,071	25.8%
EPS (adj) ($)	7.60	10.50	12.58	14.50	24.0%
Diluted shares (mn)	201.5	204.4	207.0	210.7	1.5%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	31.6	33.8	34.8	34.7	33.7
Operating margin (adj) (%)	25.7	27.2	28.0	28.5	27.4
Pre-tax (adj) margin (%)	26.3	29.8	30.1	29.3	28.9
Net (adj) margin (%)	21.3	24.2	24.3	23.6	23.3
ROIC (%)	4.4	6.2	7.0	7.3	6.2
ROA (%)	2.4	9.6	4.8	4.3	5.3
ROE (%)	6.5	21.3	9.6	8.0	11.4
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	1,053	1,185	1,272	1,443	11.1%
Goodwill	1,056	1,446	1,446	1,446	11.0%
Cash and equivalents	1,470	2,403	5,982	10,263	91.1%
Total assets	13,299	17,400	21,819	27,054	26.7%
Short and long-term debt	1,486	1,487	1,487	1,487	0.0%
Other long-term liabilities	56	93	93	93	18.4%
Total liabilities	8,267	9,571	10,841	12,465	14.7%
Net debt/(funds)	-2,794	-3,871	-7,450	-11,731	N/A
Shareholders' equity	5,032	7,829	10,978	14,589	42.6%
Change in working capital	174	-192	-61	165	-1.7%
Cash flow from operations	2,723	3,252	4,179	5,016	22.6%
Capital expenditure	-550	-601	-820	-976	N/A
Free cash flow	2,173	2,651	3,359	4,040	23.0%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	99.0	71.6	59.8	51.9	70.6
EV/sales (x)	21.8	17.7	14.6	12.1	16.6
EV/EBITDA (adj) (x)	68.8	52.3	42.0	35.0	49.5
Equity FCF yield (%)	1.4	1.7	2.2	2.5	2.0
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	-1.2	-1.3	-2.0	-2.6	-1.8
Total debt/capital (%)	22.8	16.0	11.9	9.2	15.0
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Deferred revenue	4,730	5,846	7,304	9,080	24.3%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024) **USD 752.45**
Price Target **USD 870.00**

Why OVERWEIGHT?

NOW has strong exposure to the SaaS theme that is reshaping the software industry. The company's focus on cloud management tools should continue to drive top line growth as private/hybrid cloud deployments and PaaS become more mainstream.

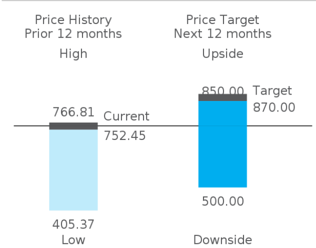
Upside case **USD 850.00**

Our upside case is based on CY25 EV/FCF of 44x and our base case FCF estimate.

Downside case **USD 500.00**

Our downside case is based on CY25 EV/FCF of 26x and our base case FCF estimate.

Upside/Downside scenarios



U.S. Software | POSITIVE

Teradata Corp. (TDC)

UNDERWEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	1,795	1,837	1,904	2,018	4.0%
EBITDA (adj)	418	439	466	493	5.6%
Operating profit (adj)	286	324	372	422	13.9%
Pre-tax income (adj)	235	269	324	378	17.2%
Net income (adj)	174	207	243	284	17.7%
EPS (adj) ($)	1.65	2.02	2.44	2.94	21.3%
Diluted shares (mn)	105.7	102.4	99.5	96.5	-3.0%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	23.3	23.9	24.5	24.4	24.0
Operating margin (adj) (%)	15.9	17.6	19.5	20.9	18.5
Pre-tax (adj) margin (%)	13.1	14.6	17.0	18.7	15.9
Net (adj) margin (%)	9.7	11.3	12.8	14.1	11.9
ROIC (%)	20.9	35.5	36.3	35.6	32.1
ROA (%)	8.6	11.8	12.4	12.9	11.4
ROE (%)	67.4	2,375.1	251.5	126.7	705.2
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	244	226	153	112	-22.8%
Goodwill	390	396	396	396	0.5%
Cash and equivalents	569	344	591	913	17.1%
Total assets	2,022	1,755	1,960	2,206	3.0%
Short and long-term debt	573	573	573	573	0.0%
Other long-term liabilities	150	140	140	140	-2.3%
Total liabilities	1,764	1,746	1,863	1,982	4.0%
Net debt/(funds)	-71	142	-105	-427	N/A
Shareholders' equity	258	9	97	224	-4.6%
Change in working capital	152	33	86	154	0.5%
Cash flow from operations	419	349	408	492	5.5%
Capital expenditure	-14	-17	-21	-30	N/A
Free cash flow	403	330	387	462	4.7%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	29.6	24.1	19.9	16.6	22.5
EV/sales (x)	3.0	3.0	2.9	2.7	2.9
EV/EBITDA (adj) (x)	13.1	12.5	11.7	11.1	12.1
Equity FCF yield (%)	7.8	6.6	8.0	9.8	8.1
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	-0.2	0.3	-0.2	-0.9	-0.2
Total debt/capital (%)	69.0	98.5	85.6	71.9	81.2
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Deferred revenue	589	620	732	854	13.2%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 48.69**
Price Target	**USD 46.00**

Why UNDERWEIGHT?

Teradata's core EDW product is facing structural headwinds, slowing growth. Diversification into ancillary growth areas will take time as well as diluted margins in the near term.

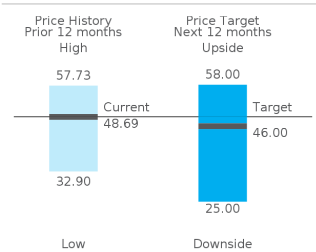
Upside case **USD 58.00**

Teradata may outperform near term and dispel concerns around the customer spending environment if macro gets meaningfully stronger. Our upside case is based on CY25E EV/FCF of 17x.

Downside case **USD 25.00**

There is still a reliance on large deals in the near term, which could diminish further if macro gets worse or if competitive threats from new cloud vendors become more meaningful. Our downside case is based on CY25E EV/FCF of 8x.

Upside/Downside scenarios



U.S. Software **POSITIVE**

BigCommerce (BIGC)

EQUAL WEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	279	305	337	382	11.0%
EBITDA (adj)	-36	4	30	43	N/A
Operating profit (adj)	-47	-9	17	27	N/A
Pre-tax income (adj)	-46	-4	14	25	N/A
Net income (adj)	-46	-4	14	25	N/A
EPS (adj) ($)	-0.63	-0.06	0.15	0.26	N/A
Diluted shares (mn)	89	91	93	95	2.0%
DPS ($)	0.00	0.00	0.00	0.00	N/A

Margin and return data	2022A	2023E	2024E	2025E	Average
EBITDA (adj) margin (%)	-12.7	1.2	8.9	11.2	2.1
Operating margin (adj) (%)	-50.0	-23.4	-9.8	-5.1	-22.1
Pre-tax (adj) margin (%)	-16.4	-1.2	4.1	6.5	-1.8
Net (adj) margin (%)	-16.6	-1.4	4.1	6.5	-1.9
ROIC (%)	-32.7	-17.4	-8.0	-4.6	-15.7
ROA (%)	-10.0	-2.1	3.7	5.7	-0.7
ROE (%)	-207.8	-85.0	90.3	87.4	-28.8

Balance sheet and cash flow ($mn)	2022A	2023E	2024E	2025E	CAGR
Net PP&E	9	8	-1	-12	N/A
Goodwill	0	0	0	0	N/A
Cash and equivalents	92	73	88	129	12.2%
Total assets	474	437	450	482	0.6%
Short and long-term debt	337	339	339	338	0.1%
Other long-term liabilities	10	9	9	9	-5.1%
Total liabilities	428	416	413	420	-0.7%
Net debt/(funds)	246	266	250	209	-5.3%
Shareholders' equity	46	22	37	63	11.1%
Change in working capital	-21	-22	-9	5	N/A
Cash flow from operations	-89	-33	20	46	N/A
Capital expenditure	-5	-4	-4	-4	N/A
Free cash flow	-95	-37	16	42	N/A

Valuation and leverage metrics	2022A	2023E	2024E	2025E	Average
P/E (adj) (x)	N/A	N/A	56.3	32.3	44.3
EV/sales (x)	3.4	3.2	2.8	2.4	3.0
EV/EBITDA (adj) (x)	-26.9	271.9	31.9	21.5	74.6
Equity FCF yield (%)	-12.6	-4.9	2.0	5.2	-2.5
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	-6.9	74.3	8.3	4.9	20.2
Total debt/capital (%)	N/A	N/A	N/A	N/A	N/A

Selected operating metrics ($mn)	2022A	2023E	2024E	2025E	CAGR
Deferred revenue	20	31	29	34	20.4%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024) **USD 8.44**
Price Target **USD 10.00**

Why EQUAL WEIGHT?

Ecommerce is still a nascent market with low penetration rates. BigCommerce is well positioned to take advantage within Enterprise customers and is only starting to branch outside the US.

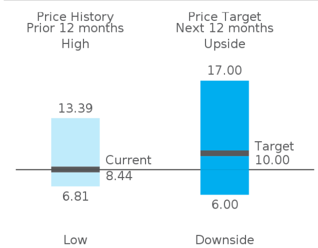
Upside case **USD 17.00**

Our upside case is based on 10% premium to CY25 revenue with a 4x multiple.

Downside case **USD 6.00**

Our downside case is based on 15% discount to CY25 revenue with a 2.5x multiple.

Upside/Downside scenarios



U.S. Software **POSITIVE**

Datadog, Inc. (DDOG)

OVERWEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	1,675	2,104	2,593	3,306	25.4%
EBITDA (adj)	353	493	621	827	32.8%
Operating profit (adj)	326	454	558	752	32.1%
Pre-tax income (adj)	350	549	658	852	34.5%
Net income (adj)	338	535	635	822	34.5%
EPS (adj) ($)	0.98	1.53	1.78	2.27	32.3%
Diluted shares (mn)	345.2	350.0	357.3	362.1	1.6%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	21.1	23.4	23.9	25.0	23.4
Operating margin (adj) (%)	19.5	21.6	21.5	22.7	21.3
Pre-tax (adj) margin (%)	20.9	26.1	25.4	25.8	24.5
Net (adj) margin (%)	20.2	25.4	24.5	24.9	23.7
ROIC (%)	-2.7	0.0	8.1	9.4	3.7
ROA (%)	-1.7	2.1	7.5	8.0	4.0
ROE (%)	-3.6	4.1	13.5	13.4	6.9
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	125	173	209	250	25.8%
Goodwill	348	349	349	349	0.0%
Cash and equivalents	339	402	1,099	1,967	79.7%
Total assets	3,005	3,789	4,650	5,761	24.2%
Short and long-term debt	838	884	868	852	0.6%
Other long-term liabilities	6	8	8	8	7.1%
Total liabilities	1,594	1,829	2,056	2,345	13.7%
Net debt/(funds)	499	482	-231	-1,115	N/A
Shareholders' equity	1,411	1,960	2,595	3,416	34.3%
Change in working capital	6	29	99	90	141.2%
Cash flow from operations	418	610	795	985	33.0%
Capital expenditure	-65	-73	-99	-117	N/A
Free cash flow	354	537	696	869	34.9%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	N/A	87.1	74.9	58.6	73.5
EV/sales (x)	28.6	22.8	18.5	14.5	21.1
EV/EBITDA (adj) (x)	135.7	97.2	77.3	58.0	92.0
Equity FCF yield (%)	0.8	1.2	1.5	1.8	1.3
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	1.8	1.3	1.0	0.8	1.2
Total debt/capital (%)	37.3	31.1	25.1	20.0	28.3
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Deferred revenue	556	723	925	1,156	27.7%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 132.98**
Price Target	**USD 138.00**

Why OVERWEIGHT?

We see Datadog as a platform leader in observability, benefiting from secular tailwinds of cloud migration and digital transformation. The company's depth and breadth of its observability platform, along with best-in-class customer economics should continue to drive strong LT growth.

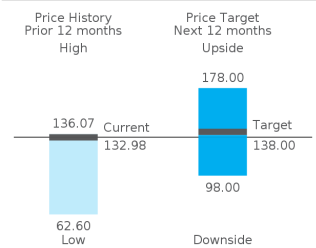
Upside case **USD 178.00**

Our upside case is based on 15% premium to CY25 FCF and a ~64.0x multiple.

Downside case **USD 98.00**

Our downside case is based on 15% discount to CY25 FCF and a ~48.0x multiple.

Upside/Downside scenarios



U.S. Software **POSITIVE**

DoubleVerify Holdings, Inc. (DV)

OVERWEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	452	572	707	869	24.3%
EBITDA (adj)	142	181	222	287	26.5%
Operating profit (adj)	142	181	222	287	26.5%
Pre-tax income (adj)	141	175	223	288	26.8%
Net income (adj)	129	144	170	219	19.4%
EPS (adj) ($)	0.75	0.83	0.97	1.25	18.2%
Diluted shares (mn)	171	173	175	176	1.0%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	31.3	31.7	31.4	33.0	31.9
Operating margin (adj) (%)	0.0	0.0	0.0	0.0	0.0
Pre-tax (adj) margin (%)	31.2	30.7	31.6	33.1	31.6
Net (adj) margin (%)	28.5	25.2	24.0	25.2	25.7
ROIC (%)	0.5	0.4	0.5	0.6	0.5
ROA (%)	0.0	0.0	0.0	0.0	0.0
ROE (%)	29.5	28.1	27.3	29.6	28.6
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	47	56	67	73	15.7%
Goodwill	343	431	431	431	7.9%
Cash and equivalents	268	293	423	582	29.5%
Total assets	1,037	1,252	1,441	1,701	17.9%
Short and long-term debt	9	9	9	9	0.7%
Other long-term liabilities	4	7	7	7	17.8%
Total liabilities	160	194	201	224	11.9%
Net debt/(funds)	-185	-198	-306	-441	N/A
Shareholders' equity	877	1,058	1,241	1,477	19.0%
Change in working capital	-21	-53	-60	-89	N/A
Cash flow from operations	95	108	153	185	25.0%
Capital expenditure	-40	-18	-24	-27	N/A
Free cash flow	55	89	130	159	42.5%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	53.6	48.7	41.7	32.4	44.1
EV/sales (x)	16.0	12.6	10.2	8.3	11.8
EV/EBITDA (adj) (x)	51.0	39.9	32.5	25.2	37.1
Equity FCF yield (%)	0.8	1.3	1.8	2.2	1.5
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	-1.3	-1.1	-1.4	-1.5	-1.3
Total debt/capital (%)	1.0	0.9	0.7	0.6	0.8

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 40.44**
Price Target	**USD 43.00**

Why OVERWEIGHT?

DoubleVerify is seated amidst many secular tailwinds and has a favorable competitive landscape, with only two other large vendors capable of going after the large and growing ad verification market. We see room for a multi-year growth story to take hold in the market and view DoubleVerify as best-positioned to benefit from the market growth.

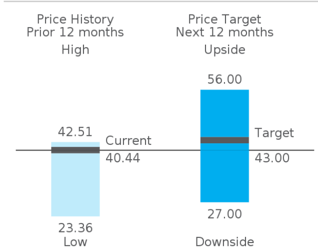
Upside case **USD 56.00**

If DoubleVerify can continue to assert its leadership status in the market by acquiring new customers, deepening integrations, and developing new products in growth media, it can see upside to estimates and to the multiple.

Downside case **USD 27.00**

If competition stiffens amongst DoubleVerify and the other two large vendors, more significant investment into R&D and S&M may be required, which could drive down numbers, and hence, the multiple as well.

Upside/Downside scenarios



U.S. Software | POSITIVE

Dynatrace, Inc. (DT)

EQUAL WEIGHT

Income statement ($mn)	2023A	2024E	2025E	2026E	CAGR
Revenue	1,159	1,417	1,686	2,008	20.1%
EBITDA (adj)	305	400	470	560	22.5%
Operating profit (adj)	292	385	453	539	22.7%
Pre-tax income (adj)	296	403	453	539	22.2%
Net income (adj)	282	333	383	455	17.3%
EPS (adj) ($)	0.97	1.11	1.25	1.47	14.9%
Diluted shares (mn)	291.7	299.3	306.5	310.5	2.1%
DPS ($)	0.00	0.00	0.00	0.00	N/A

Margin and return data	2023A	2024E	2025E	2026E	Average
EBITDA (adj) margin (%)	26.3	28.2	27.9	27.9	27.6
Operating margin (adj) (%)	25.2	27.1	26.9	26.8	26.5
Pre-tax (adj) margin (%)	25.5	28.5	26.9	26.8	26.9
Net (adj) margin (%)	24.4	23.5	22.7	22.7	23.3
ROIC (%)	5.5	5.8	6.8	7.1	6.3
ROA (%)	3.9	3.2	2.7	3.0	3.2
ROE (%)	6.7	5.4	4.5	4.9	5.4

Balance sheet and cash flow ($mn)	2023A	2024E	2025E	2026E	CAGR
Net PP&E	54	50	62	76	12.3%
Goodwill	1,282	1,310	1,310	1,310	0.7%
Cash and equivalents	555	859	1,229	1,681	44.7%
Total assets	2,765	3,269	3,823	4,474	17.4%
Short and long-term debt	0	0	0	0	N/A
Other long-term liabilities	0	0	0	0	N/A
Total liabilities	1,160	1,327	1,525	1,741	14.5%
Net debt/(funds)	-555	-859	-1,229	-1,681	N/A
Shareholders' equity	1,605	1,942	2,299	2,733	19.4%
Change in working capital	184	27	23	45	-37.3%
Cash flow from operations	355	339	399	488	11.2%
Capital expenditure	-22	-24	-29	-35	N/A
Free cash flow	333	305	370	453	10.8%

Valuation and leverage metrics	2023A	2024E	2025E	2026E	Average
P/E (adj) (x)	60.3	52.4	46.7	39.7	49.8
EV/sales (x)	14.9	12.1	10.2	8.6	11.4
EV/EBITDA (adj) (x)	56.5	43.0	36.6	30.7	41.7
Equity FCF yield (%)	2.0	1.8	2.1	2.5	2.1
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	-2.3	-1.8	-1.5	-1.3	-1.7
Total debt/capital (%)	0.0	0.0	0.0	0.0	0.0

Selected operating metrics ($mn)	2023A	2024E	2025E	2026E	CAGR
Deferred revenue	845	972	1,118	1,275	14.7%
License revenue	0.0	0.0	0.0	0.0	N/A

Note: FY End Mar
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 58.29**
Price Target	**USD 52.00**

Why EQUAL WEIGHT?

We believe Dynatrace has a differentiated technological foundation with Grail, Smartscape, etc. and is building more product modules to leverage this. Yet, multi-product growth is in the relatively early innings and the valuation gives the company credit for executing on this initiative.

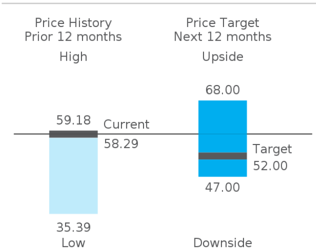
Upside case **USD 68.00**

The company can see growth tailwinds from a faster than anticipated conversion and new customer adoption of its next-gen platform. Our upside case is based on a 10% increase in our CY25 FCF and 42x FCF multiple.

Downside case **USD 47.00**

Competitive headwinds may pressure the company's growth trajectory. Our downside case is based on a 10% decrease in our CY25 FCF and a 35x FCF multiple.

Upside/Downside scenarios



U.S. Software **POSITIVE**

Integral Ad Science Holding Corp. (IAS)

EQUAL WEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	408	471	538	634	15.8%
EBITDA (adj)	127	158	181	220	20.3%
Operating profit (adj)	127	158	181	220	20.3%
Pre-tax income (adj)	125	145	173	212	19.4%
Net income (adj)	127	141	107	132	1.3%
EPS (adj) ($)	0.81	0.88	0.69	0.85	1.5%
Diluted shares (mn)	157	158	155	156	-0.2%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	31.0	33.5	33.6	34.7	33.2
Operating margin (adj) (%)	31.0	33.5	33.6	34.7	33.2
Pre-tax (adj) margin (%)	30.5	30.8	32.1	33.5	31.7
Net (adj) margin (%)	31.1	29.8	20.0	20.8	25.4
ROIC (%)	13.2	15.6	12.0	16.0	14.2
ROA (%)	10.8	11.5	7.8	8.4	9.6
ROE (%)	15.6	15.6	11.0	12.5	13.7
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	2	-4	-37	-77	N/A
Goodwill	674	674	674	674	0.0%
Cash and equivalents	87	122	243	401	66.5%
Total assets	1,169	1,228	1,371	1,576	10.5%
Short and long-term debt	79	-41	-282	-599	N/A
Other long-term liabilities	47	37	31	36	-8.0%
Total liabilities	360	328	388	486	10.5%
Net debt/(funds)	166	81	-40	-198	N/A
Shareholders' equity	810	901	976	1,054	9.2%
Change in working capital	-31	-14	6	11	N/A
Cash flow from operations	72	106	128	165	31.5%
Capital expenditure	-2	-4	-7	-6	N/A
Free cash flow	75	110	134	171	32.0%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	19.1	17.5	22.4	18.3	19.3
EV/sales (x)	6.7	5.7	4.7	3.8	5.2
EV/EBITDA (adj) (x)	21.8	16.9	14.1	10.9	15.9
Equity FCF yield (%)	2.9	4.2	5.2	6.6	4.7
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	1.3	0.5	-0.2	-0.9	0.2
Total debt/capital (%)	8.9	-4.7	-40.7	-131.9	-42.1
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Deferred revenue	0	13	71	152	1054.1%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 15.51**
Price Target	**USD 17.00**

Why EQUAL WEIGHT?

IAS is a story with a large potential opportunity on the horizon, but the company needs to prove that it can execute before it can be assigned a more premium multiple.

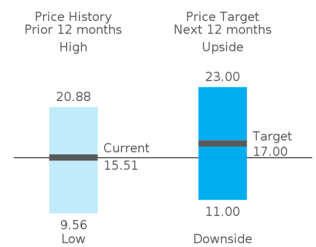
Upside case **USD 23.00**

If IAS can prove its ability to execute better and quickly raise its growth rate to converge with faster-growing competitors, the multiple could see some upside.

Downside case **USD 11.00**

If IAS continues to operate as a company that is growing slower than its largest competitor, the current implied valuation discount could persist.

Upside/Downside scenarios



U.S. Software **POSITIVE**

Jamf Holding Corp. (JAMF)

EQUAL WEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	479	558	649	768	17.0%
EBITDA (adj)	78	95	130	172	30.0%
Operating profit (adj)	26	44	72	103	58.2%
Pre-tax income (adj)	28	50	72	103	54.0%
Net income (adj)	21	38	54	78	54.0%
EPS (adj) ($)	0.16	0.28	0.39	0.54	48.6%
Diluted shares (mn)	131.0	135.6	140.9	145.9	3.6%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	16.3	17.0	20.0	22.4	18.9
Operating margin (adj) (%)	5.4	7.9	11.0	13.4	9.4
Pre-tax (adj) margin (%)	5.9	9.0	11.0	13.4	9.8
Net (adj) margin (%)	4.5	6.9	8.4	10.2	7.5
ROIC (%)	-13.1	-10.3	-8.2	-6.1	-9.4
ROA (%)	-9.2	-6.8	-4.9	-3.5	-6.1
ROE (%)	-20.1	-15.3	-11.2	-8.1	-13.7
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	19	5	-47	-109	N/A
Goodwill	857	877	877	877	0.8%
Cash and equivalents	224	264	379	538	33.8%
Total assets	1,530	1,585	1,684	1,824	6.0%
Short and long-term debt	365	366	366	366	0.2%
Other long-term liabilities	29	30	40	47	17.2%
Total liabilities	828	876	946	1,031	7.6%
Net debt/(funds)	140	103	-13	-171	N/A
Shareholders' equity	701	709	738	793	4.2%
Change in working capital	41	-9	13	19	-22.1%
Cash flow from operations	90	57	122	166	22.6%
Capital expenditure	-8	-4	-6	-8	N/A
Free cash flow	88	69	116	158	21.8%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	N/A	70.6	51.6	37.2	53.1
EV/sales (x)	6.1	5.2	4.5	3.8	4.9
EV/EBITDA (adj) (x)	37.3	30.8	22.4	17.0	26.9
Equity FCF yield (%)	3.2	2.0	4.1	5.4	3.7
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	1.8	1.1	-0.1	-1.0	0.4
Total debt/capital (%)	34.2	34.1	33.2	31.6	33.3
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
License revenue	5	1	0	0	-100.0%
Services revenue	19	16	13	9	-21.5%
Deferred revenue	346	395	450	517	14.3%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 19.91**
Price Target	**USD 20.00**

Why EQUAL WEIGHT?

We expect Jamf to face headwinds as companies remain cautious on hiring, limiting adoption and device expansion for the company's best-in-breed Apple device-focused platform (MDM and security solutions). Likewise, limited IT budget growth is likely to weigh on the cross-selling of security and other solutions, limiting ARPU expansion near term.

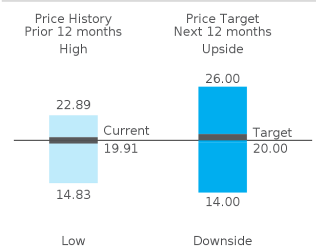
Upside case **USD 26.00**

Our upside case is based on a 10% premium to our CY25 base uFCF estimate and a 22x EV/uFCF multiple.

Downside case **USD 14.00**

Our downside case is based on a 10% discount to our CY25 base uFCF estimate and a 15x EV/uFCF multiple.

Upside/Downside scenarios



U.S. Software | POSITIVE

Klaviyo, Inc. (KVYO)

EQUAL WEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	473	693	895	1,140	34.1%
EBITDA (adj)	-17	92	116	156	N/A
Operating profit (adj)	-26	78	99	132	N/A
Pre-tax income (adj)	-20	101	137	177	N/A
Net income (adj)	-20	99	136	174	N/A
EPS (adj) ($)	N/A	0.41	0.51	0.65	N/A
Diluted shares (mn)	0	283	302	306	N/A
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	-3.6	13.2	13.0	13.6	9.1
Operating margin (adj) (%)	-5.5	11.3	11.1	11.6	7.1
Pre-tax (adj) margin (%)	-4.3	14.6	15.3	15.5	10.3
Net (adj) margin (%)	-4.3	14.3	15.2	15.2	10.1
ROIC (%)	-4.2	7.1	8.0	9.1	5.0
ROA (%)	-7.8	-28.8	-10.7	-10.1	-14.4
ROE (%)	-9.9	-34.2	-12.8	-12.3	-17.3
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	46	50	82	116	36.2%
Goodwill	0	0	0	0	N/A
Cash and equivalents	386	723	818	952	35.1%
Total assets	629	1,085	1,232	1,435	31.6%
Short and long-term debt	62	62	50	41	-12.9%
Other long-term liabilities	1	6	6	6	94.1%
Total liabilities	133	170	200	251	23.4%
Net debt/(funds)	-323	-661	-768	-911	N/A
Shareholders' equity	496	915	1,032	1,184	33.7%
Change in working capital	-35	-20	-9	-6	N/A
Cash flow from operations	-24	99	144	191	N/A
Capital expenditure	-16	-11	-42	-40	N/A
Free cash flow	-5	-2	2	3	N/A
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	N/A	61.6	48.8	38.8	49.7
EV/sales (x)	14.8	10.1	7.8	6.1	9.7
EV/EBITDA (adj) (x)	-407.2	76.2	60.0	44.9	-56.5
Equity FCF yield (%)	0.0	-0.4	-0.5	-0.5	-0.3
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	18.9	-7.2	-6.6	-5.9	-0.2
Total debt/capital (%)	12.6	6.8	4.8	3.5	6.9
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Deferred revenue	25	38	59	96	56.4%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 25.15**
Price Target	**USD 32.00**

Why EQUAL WEIGHT?

Klaviyo has a path for durable growth in the marketing automation space considering the tailwinds behind it, stemming from the need to reach modern consumers. However, shares already trade at a premium to the space, and we would need to see revisions to estimates to warrant further multiple expansion.

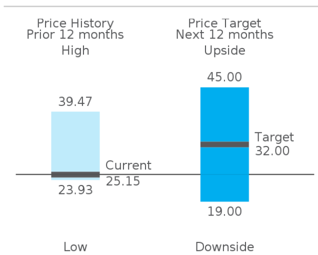
Upside case **USD 45.00**

If Klaviyo is able to expand its presence in both the core retail space and other growth verticals, and cross-sell newer products, it can see revisions to top-line estimates. we think this could support a push for a more premium multiple given higher growth.

Downside case **USD 19.00**

If Klaviyo sees core retail growth slow, and is unable to make inroads into other growth verticals and cross-sell newer products, it can see estimates stagnate or fall. We think this could invite scrutiny to the premium multiple.

Upside/Downside scenarios



U.S. Software **POSITIVE**

Sprout Social, Inc. (SPT)

OVERWEIGHT

Income statement ($mn)	2022A	2023E	2024E	2025E	CAGR
Revenue	254	331	431	559	30.1%
EBITDA (adj)	-1	7	19	34	N/A
Operating profit (adj)	-4	4	15	28	N/A
Pre-tax income (adj)	-2	7	12	24	N/A
Net income (adj)	-3	7	11	20	N/A
EPS (adj) ($)	-0.05	0.13	0.19	0.35	N/A
Diluted shares (mn)	54	56	57	57	1.7%
DPS ($)	0.00	0.00	0.00	0.00	N/A

Margin and return data	2022A	2023E	2024E	2025E	Average
EBITDA (adj) margin (%)	-20.4	-21.5	-15.0	-11.1	-17.0
Operating margin (adj) (%)	0.0	0.0	0.0	0.0	0.0
Pre-tax (adj) margin (%)	0.0	0.0	0.0	0.0	0.0
Net (adj) margin (%)	-1.8	1.1	3.0	4.2	1.6
ROIC (%)	-0.0	0.0	0.1	0.1	0.0
ROA (%)	0.0	0.0	0.0	0.0	0.0
ROE (%)	-6.5	4.9	16.8	26.9	10.5

Balance sheet and cash flow ($mn)	2022A	2023E	2024E	2025E	CAGR
Net PP&E	12	11	11	11	-1.5%
Goodwill	2	123	123	123	276.5%
Cash and equivalents	80	31	44	65	-6.7%
Total assets	294	409	470	558	23.8%
Short and long-term debt	22	19	19	19	-4.6%
Other long-term liabilities	0	0	0	0	N/A
Total liabilities	152	263	313	381	35.9%
Net debt/(funds)	-58	-12	-24	-45	N/A
Shareholders' equity	142	145	156	177	7.5%
Change in working capital	22	18	52	57	36.9%
Cash flow from operations	11	18	44	63	80.8%
Capital expenditure	-2	-2	-4	-6	N/A
Free cash flow	9	16	40	57	86.6%

Valuation and leverage metrics	2022A	2023E	2024E	2025E	Average
P/E (adj) (x)	N/A	N/A	N/A	N/A	N/A
EV/sales (x)	14.9	11.5	8.8	6.8	10.5
EV/EBITDA (adj) (x)	-3,509.9	550.2	200.8	112.9	-661.5
Equity FCF yield (%)	0.2	0.4	1.2	1.7	0.9
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	53.4	-1.7	-1.3	-1.4	12.3
Total debt/capital (%)	N/A	N/A	N/A	N/A	N/A

Selected operating metrics ($mn)	2022A	2023E	2024E	2025E	CAGR
Deferred revenue	96	137	189	256	38.6%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 63.64**
Price Target	**USD 75.00**

Why OVERWEIGHT?

Sprout Social operates in a large and growing market as social media continues to become more important to the customer engagement strategy. Additionally, recent products, such as Social Listening and Premium Analytics, can help the business continue to attack at the enterprise level. We believe this offers an attractive story at a discounted valuation.

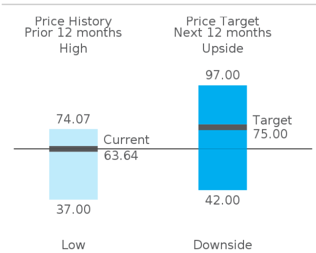
Upside case **USD 97.00**

If Sprout Social can continue to makes strides upmarket and maintain a leading position in the growing market, there is room for estimates and the multiple to move higher.

Downside case **USD 42.00**

If Sprout Social cannot continue to deliver value relative to other offerings in the fragmented space, estimates and the valuation multiple could see a contraction.

Upside/Downside scenarios



U.S. Software **POSITIVE**

WalkMe Ltd. (WKME) UNDERWEIGHT

Income statement ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Revenue	245	267	291	317	8.9%
EBITDA (adj)	-50	-1	28	51	N/A
Operating profit (adj)	-58	-8	20	43	N/A
Pre-tax income (adj)	-53	6	33	55	N/A
Net income (adj)	-57	1	29	51	N/A
EPS (adj) ($)	-0.67	0.01	0.27	0.47	N/A
Diluted shares (mn)	85	89	109	109	8.5%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	-20.6	-0.4	9.6	16.1	1.2
Operating margin (adj) (%)	-23.8	-2.8	7.0	13.4	-1.6
Pre-tax (adj) margin (%)	-21.6	2.2	11.4	17.5	2.4
Net (adj) margin (%)	-23.2	0.3	10.0	16.2	0.8
ROIC (%)	-21.7	0.3	9.8	14.9	0.9
ROA (%)	-12.8	0.2	6.0	9.6	0.7
ROE (%)	-21.7	0.3	9.8	14.9	0.9
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	13	12	9	8	-17.1%
Goodwill	N/A	N/A	N/A	N/A	N/A
Cash and equivalents	94	202	236	287	45.1%
Total assets	445	461	488	534	6.2%
Short and long-term debt	N/A	N/A	N/A	N/A	N/A
Other long-term liabilities	14	21	21	21	15.3%
Total liabilities	183	194	193	189	1.2%
Net debt/(funds)	-94	-202	-236	-287	N/A
Shareholders' equity	262	267	295	345	9.5%
Change in working capital	6	13	4	0	-67.4%
Cash flow from operations	-47	16	39	58	N/A
Capital expenditure	-3	-1	-3	-3	N/A
Free cash flow	-56	11	34	52	N/A
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	N/A	N/A	39.3	22.2	30.8
EV/sales (x)	3.8	3.1	2.7	2.3	3.0
EV/EBITDA (adj) (x)	-18.5	-689.6	28.4	14.5	-166.3
Equity FCF yield (%)	-6.3	1.2	3.0	4.5	0.6
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	1.9	168.4	-8.4	-5.6	39.1
Total debt/capital (%)	0.0	0.0	0.0	0.0	0.0
Selected operating metrics ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Services revenue	24	19	15	11	-23.4%
Deferred revenue	110	121	111	100	-3.0%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 10.48**
Price Target	**USD 10.00**

Why UNDERWEIGHT?

We think WalkMe's relatively non-mission critical platform will be de-prioritized by CIOs in the current macro environment and the company's partial seat based model could face further headwinds from less hiring amongst the customer base.

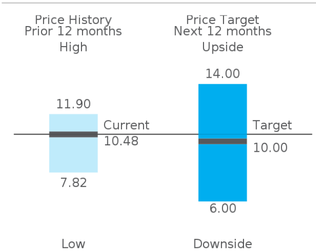
Upside case **USD 14.00**

Our upside scenario is based on a ~20.0x CY25 EV/FCF multiple and a 10% premium to our base case CY25 FCF estimate.

Downside case **USD 6.00**

Our downside scenario is based on a ~8.0x CY25 EV/FCF multiple and a 10% discount to our base case CY25 FCF estimate.

Upside/Downside scenarios



U.S. Software **POSITIVE**

ZoomInfo Technologies Inc. (ZI)

EQUAL WEIGHT

Income statement ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Revenue	1,100	1,234	1,249	1,403	8.5%
EBITDA (adj)	490	526	564	666	10.8%
Operating profit (adj)	448	495	506	602	10.4%
Pre-tax income (adj)	400	453	466	562	12.0%
Net income (adj)	363	414	419	478	9.6%
EPS (adj) ($)	0.88	1.00	1.03	1.15	9.2%
Diluted shares (mn)	410.8	411.8	408.8	414.8	0.3%
DPS ($)	0.00	0.00	0.00	0.00	N/A
Margin and return data	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
EBITDA (adj) margin (%)	44.5	42.7	45.2	47.4	44.9
Operating margin (adj) (%)	40.7	40.2	40.5	42.9	41.1
Pre-tax (adj) margin (%)	36.4	36.7	37.3	40.1	37.6
Net (adj) margin (%)	33.0	33.5	33.6	34.1	33.6
ROIC (%)	4.6	6.3	5.9	6.4	5.8
ROA (%)	0.9	2.4	3.3	4.2	2.7
ROE (%)	2.8	7.3	9.1	10.4	7.4
Balance sheet and cash flow ($mn)	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Net PP&E	52	68	107	153	43.4%
Goodwill	1,693	1,693	1,693	1,693	0.0%
Cash and equivalents	418	536	949	1,449	51.4%
Total assets	7,136	7,191	7,625	8,231	4.9%
Short and long-term debt	1,236	1,233	1,233	1,233	-0.1%
Other long-term liabilities	6	5	5	5	-5.1%
Total liabilities	4,865	4,836	4,835	4,899	0.2%
Net debt/(funds)	690	572	159	-341	N/A
Shareholders' equity	2,272	2,355	2,791	3,332	13.6%
Change in working capital	-59	-164	-85	-100	N/A
Cash flow from operations	417	409	452	547	9.5%
Capital expenditure	29	27	38	47	17.6%
Free cash flow	388	381	413	500	8.8%
Valuation and leverage metrics	**2022A**	**2023E**	**2024E**	**2025E**	**Average**
P/E (adj) (x)	17.8	15.7	15.4	13.7	15.6
EV/sales (x)	6.8	6.0	6.0	5.3	6.0
EV/EBITDA (adj) (x)	15.2	14.2	13.2	11.2	13.5
Equity FCF yield (%)	7.0	6.9	7.5	8.7	7.5
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Net debt/EBITDA (adj) (x)	1.6	1.4	1.3	1.1	1.4
Total debt/capital (%)	35.2	34.4	30.6	27.0	31.8
Selected operating metrics	**2022A**	**2023E**	**2024E**	**2025E**	**CAGR**
Deferred revenue	419.9	440.9	489.4	572.6	10.9%

Note: FY End Dec
Source: Company data, Bloomberg, Barclays Research

Price (22-Jan-2024)	**USD 15.77**
Price Target	**USD 18.00**

Why EQUAL WEIGHT?

ZoomInfo's platform is best-of-class in terms of data accuracy and comprehensibility of features in the evolving go-to-market intelligence competitive landscape. The company also provides an industry-best mix of top-line growth and cash flow generation. However, we believe the current valuation levels fully reflect the LT growth potential.

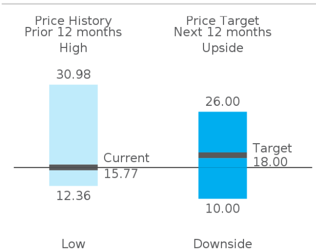
Upside case **USD 26.00**

If ZoomInfo could continue to drive industry-best growth and profitability and hold off competition, the multiple and estimates could move higher.

Downside case **USD 10.00**

If ZoomInfo fails to maintain its industry lead and to continue to deliver growth/profitability, the multiple could see contraction.

Upside/Downside scenarios



Valuation Methodology and Risks

U.S. Software

DigitalOcean (DOCN / DOCN)

Valuation Methodology: Our $43 price target is based on ~28.7x EV/CY25E FCF of $224.2mn
Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: The primary risks for DigitalOcean is that hyperscalers drive pricing down for its core IaaS portfolio or increased competition within the IaaS or PaaS portfolio. Additionally, a prolonged weaker macro environment could cause spending to decline across certain verticals (blockchain), regions (Europe), and customer segments (customers spending less than $50/month).

ServiceNow, Inc. (NOW / NOW)

Valuation Methodology: Our price target of $870 is based on CY25 EV/FCF of 45x and CY25E FCF of $4.04bn.
Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Macroeconomic uncertainty would lead to reduced business confidence and a reluctance to move forward/invest in IT projects, which would affect ServiceNow's revenue growth. In addition, NOW competes with some of the largest software companies in the world. These competitors could develop an attractive and robust SaaS IT Service Management solution that would slow the pace of share gains for ServiceNow. Also, although the company's platform has thus far been well received by customers, the company could be unable to invest the necessary resources to ensure it remains a best in class solution. As the platform is a major driver of our long-term investment thesis, this would likely lead to multiple contraction.

Teradata Corp. (TDC / TDC)

Valuation Methodology: Our PT of $46 is based on a multiple of 14x our CY25 FCF estimate less lease expenses of ~$372mn.
Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: The upcoming software-only and cloud offerings could see greater than expected traction, transforming Teradata form a hardware company into a software company, thereby both raising the margin profile as well as the multiple. More aggressive capital returns would lift the stock.

Source: Barclays Research

Analyst(s) Certification(s):
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Primary Stocks (Ticker, Date, Price)
DigitalOcean (DOCN, 22-Jan-2024, USD 34.85), Overweight/Positive, CD/CE/J

ServiceNow, Inc. (NOW, 22-Jan-2024, USD 752.45), Overweight/Positive, CD/CE/J/K/M

Teradata Corp. (TDC, 22-Jan-2024, USD 48.69), Underweight/Positive, CE/FA/J

Materially Mentioned Stocks (Ticker, Date, Price)
Appian Corporation (APPN, 22-Jan-2024, USD 33.78), Underweight/Positive, CE/J

BigCommerce (BIGC, 22-Jan-2024, USD 8.44), Equal Weight/Positive, CD/CE/J

Datadog, Inc. (DDOG, 22-Jan-2024, USD 132.98), Overweight/Positive, CD/CE/J

DoubleVerify Holdings, Inc. (DV, 22-Jan-2024, USD 40.44), Overweight/Positive, A/CE/D/J/L

Dynatrace, Inc. (DT, 22-Jan-2024, USD 58.29), Equal Weight/Positive, CE/J

Integral Ad Science Holding Corp. (IAS, 22-Jan-2024, USD 15.51), Equal Weight/Positive, A/CE/D/J/L

Jamf Holding Corp. (JAMF, 22-Jan-2024, USD 19.91), Equal Weight/Positive, CD/CE/E/J/L

Klaviyo, Inc. (KVYO, 22-Jan-2024, USD 25.15), Equal Weight/Positive, A/CE/D/E/FA/J/L

Sprout Social, Inc. (SPT, 22-Jan-2024, USD 63.64), Overweight/Positive, CE/J

WalkMe Ltd. (WKME, 22-Jan-2024, USD 10.48), Underweight/Positive, CE/J

ZoomInfo Technologies Inc. (ZI, 22-Jan-2024, USD 15.77), Equal Weight/Positive, CE/D/J/K/L/M

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U.S. Software

8x8 Inc. (EGHT)	Adobe Inc. (ADBE)	Alarm.com Holdings, Inc. (ALRM)
Alkami Technology, Inc. (ALKT)	Ansys, Inc. (ANSS)	Appian Corporation (APPN)
Atlassian (TEAM)	AudioCodes Ltd. (AUDC)	Autodesk Inc. (ADSK)
Bandwidth Inc. (BAND)	BigCommerce (BIGC)	Braze Inc. (BRZE)
CCC Intelligent Solutions (CCCS)	Ceridian HCM Holding Inc. (CDAY)	Check Point Software Technologies Ltd. (CHKP)
Confluent, Inc (CFLT)	Couchbase (BASE)	CrowdStrike Holdings, Inc (CRWD)
CyberArk Software (CYBR)	Datadog, Inc. (DDOG)	Definitive Healthcare Corp (DH)
Descartes Systems Group (DSGX)	DigitalOcean (DOCN)	DoubleVerify Holdings, Inc. (DV)
Dynatrace, Inc. (DT)	Elastic N.V. (ESTC)	Everbridge, Inc. (EVBG)
EverCommerce Inc. (EVCM)	Five9, Inc. (FIVN)	Fortinet, Inc. (FTNT)
Freshworks Inc. (FRSH)	Gen Digital Inc. (GEN)	GitLab Inc. (GTLB)
HubSpot, Inc. (HUBS)	Intapp, Inc. (INTA)	Integral Ad Science Holding Corp. (IAS)
Intuit Inc. (INTU)	Jamf Holding Corp. (JAMF)	Klaviyo, Inc. (KVYO)
Lightspeed Commerce Inc. (LSPD)	LivePerson, Inc. (LPSN)	MeridianLink, Inc. (MLNK)
Microsoft Corp. (MSFT)	MongoDB, Inc. (MDB)	nCino, Inc. (NCNO)
OpenText Corp. (OTEX)	Oracle Corp. (ORCL)	Palo Alto Networks (PANW)
Paycom (PAYC)	Paylocity Holding Corp (PCTY)	Pegasystems, Inc. (PEGA)
PowerSchool Holdings, Inc (PWSC)	Procore Technologies, Inc. (PCOR)	PTC Inc. (PTC)
Rapid7 (RPD)	RingCentral, Inc. (RNG)	Salesforce.com Inc. (CRM)
SAP SE (SAP)	SecureWorks (SCWX)	SentinelOne, Inc. (S)
ServiceNow, Inc. (NOW)	Similarweb Ltd. (SMWB)	Skillsoft Corp. (SKIL)
Smartsheet Inc. (SMAR)	Snowflake Computing (SNOW)	Splunk Inc. (SPLK)
Sprinklr, Inc. (CXM)	Sprout Social, Inc. (SPT)	Tenable Holdings Inc (TENB)
Teradata Corp. (TDC)	Twilio Inc. (TWLO)	Tyler Technologies, Inc. (TYL)
UiPath, Inc. (PATH)	Varonis Systems, Inc. (VRNS)	Veeva Systems Inc. (VEEV)
WalkMe Ltd. (WKME)	Workday Inc. (WDAY)	Zeta Global Holdings Corp. (ZETA)
Zoom Video Communications, Inc. (ZM)	ZoomInfo Technologies Inc. (ZI)	Zscaler, Inc. (ZS)

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DigitalOcean (DOCN / DOCN)

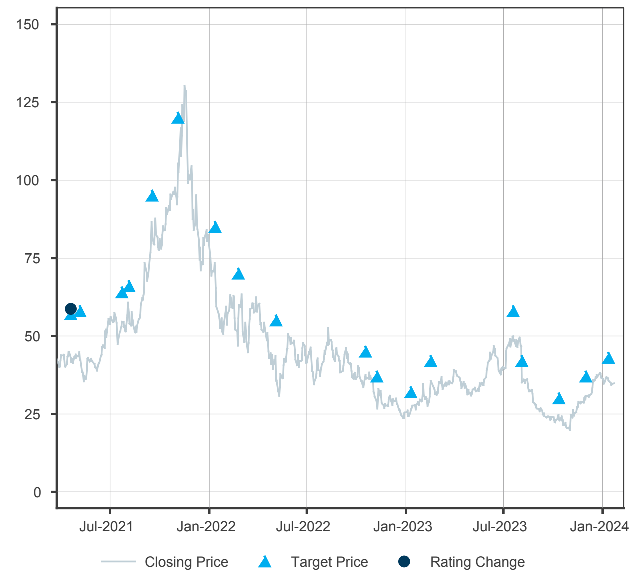
Stock Rating: **OVERWEIGHT**

Industry View: **POSITIVE**

Closing Price: **USD 34.85** (22-Jan-2024)

Rating and Price Target Chart - USD (as of 22-Jan-2024)

Currency=USD



Source: IDC, Barclays Research

Link to Barclays Live for interactive charting

Publication Date	Closing Price*	Rating	Adjusted Price Target
12-Jan-2024	36.41		43.00
01-Dec-2023	29.62		37.00
12-Oct-2023	24.70		30.00
04-Aug-2023	46.68		42.00
19-Jul-2023	49.72		58.00
16-Feb-2023	35.58		42.00
10-Jan-2023	25.24		32.00
08-Nov-2022	28.14		37.00
18-Oct-2022	36.71		45.00
05-May-2022	35.66		55.00
24-Feb-2022	55.64		70.00
12-Jan-2022	70.67		85.00
04-Nov-2021	105.32		120.00
17-Sep-2021	81.56		95.00
05-Aug-2021	58.80		66.00
23-Jul-2021	54.62		64.00
06-May-2021	42.27		58.00
19-Apr-2021	42.96	Overweight	57.00

Source: Bloomberg, Barclays Research

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Valuation Methodology: Our $43 price target is based on ~28.7x EV/CY25E FCF of $224.2mn

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: The primary risks for DigitalOcean is that hyperscalers drive pricing down for its core IaaS portfolio or increased competition within the IaaS or PaaS portfolio. Additionally, a prolonged weaker macro environment could cause spending to decline across certain verticals (blockchain), regions (Europe), and customer segments (customers spending less than $50/month).

ServiceNow, Inc. (NOW / NOW)

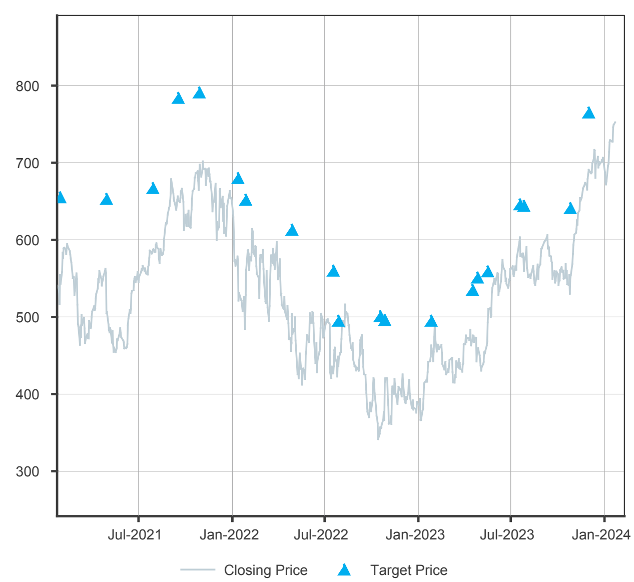
Stock Rating: **OVERWEIGHT**

Industry View: **POSITIVE**

Closing Price: **USD 752.45** (22-Jan-2024)

Rating and Price Target Chart - USD (as of 22-Jan-2024)

Currency=USD



Source: IDC, Barclays Research

Link to Barclays Live for interactive charting

Publication Date	Closing Price*	Rating	Adjusted Price Target
01-Dec-2023	685.74		765.00
26-Oct-2023	530.17		641.00
27-Jul-2023	559.89		644.00
19-Jul-2023	597.13		646.00
17-May-2023	468.24		559.00
27-Apr-2023	454.34		551.00
17-Apr-2023	463.03		535.00
26-Jan-2023	463.07		495.00
27-Oct-2022	415.67		496.00
18-Oct-2022	348.61		501.00
28-Jul-2022	436.50		495.00
18-Jul-2022	435.62		560.00
28-Apr-2022	504.02		613.00
27-Jan-2022	528.69		652.00
12-Jan-2022	572.00		680.00
28-Oct-2021	687.70		791.00
17-Sep-2021	652.15		784.00
29-Jul-2021	586.43		667.00
29-Apr-2021	505.00		653.00
28-Jan-2021	554.24		655.00

On 22-Jan-2021, prior to any intra-day change that may have been published, the rating for this security was Overweight, and the adjusted price target was 650.00.

Source: Bloomberg, Barclays Research

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Valuation Methodology: Our price target of $870 is based on CY25 EV/FCF of 45x and CY25E FCF of $4.04bn.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Macroeconomic uncertainty would lead to reduced business confidence and a reluctance to move forward/invest in IT projects, which would affect ServiceNow's revenue growth. In addition, NOW competes with some of the largest software companies in the world. These competitors could develop an attractive and robust SaaS IT Service Management solution that would slow the pace of share gains for ServiceNow. Also, although the company's platform has thus far been well received by customers, the company could be unable to invest the necessary resources to ensure it remains a best in class solution. As the platform is a major driver of our long-term investment thesis, this would likely lead to multiple contraction.

Teradata Corp. (TDC / TDC)

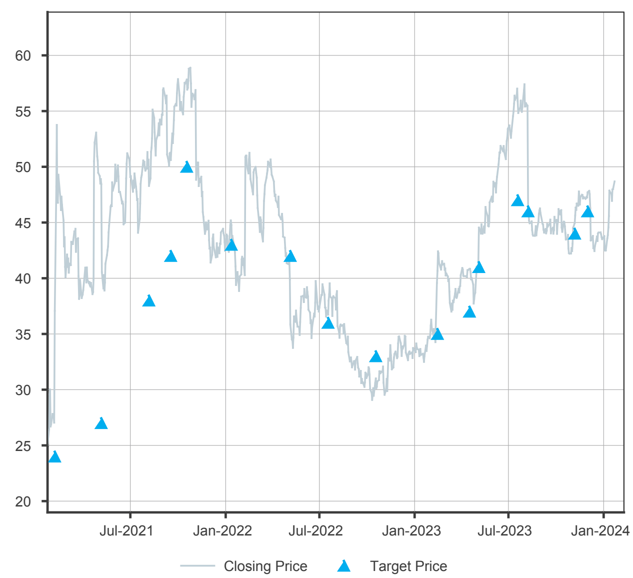
Stock Rating: **UNDERWEIGHT**

Industry View: **POSITIVE**

Closing Price: **USD 48.69** (22-Jan-2024)

Rating and Price Target Chart - USD (as of 22-Jan-2024)

Currency=USD



Source: IDC, Barclays Research

Link to Barclays Live for interactive charting

Publication Date	Closing Price*	Rating	Adjusted Price Target
01-Dec-2023	47.25		46.00
06-Nov-2023	44.96		44.00
08-Aug-2023	55.48		46.00
19-Jul-2023	57.01		47.00
05-May-2023	44.55		41.00
17-Apr-2023	40.74		37.00
14-Feb-2023	40.66		35.00
18-Oct-2022	30.63		33.00
18-Jul-2022	37.10		36.00
06-May-2022	35.84		42.00
12-Jan-2022	44.77		43.00
18-Oct-2021	57.48		50.00
17-Sep-2021	51.18		42.00
06-Aug-2021	48.29		38.00
06-May-2021	48.45		27.00
05-Feb-2021	37.08		24.00

On 22-Jan-2021, prior to any intra-day change that may have been published, the rating for this security was Underweight, and the adjusted price target was 19.00.

Source: Bloomberg, Barclays Research

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Valuation Methodology: Our PT of $46 is based on a multiple of 14x our CY25 FCF estimate less lease expenses of ~$372mn.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: The upcoming software-only and cloud offerings could see greater than expected traction, transforming Teradata form a hardware company into a software company, thereby both raising the margin profile as well as the multiple. More aggressive capital returns would lift the stock.

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