

HashiCorp

Promising New Growth Initiatives Put into Place; Look for Progress Through FY25

Reiterate Rating: NEUTRAL | PO: 28.00 USD | Price: 23.96 USD

Underwhelming Q4 growth metrics

Q4 results and outlook exceeded relatively low expectations, with \$6.4 million upside to our revenue estimate from improvement in the enterprise buying environment. The outlook for FY25 revenue growth of 11% is below our 14%, though should allay concerns for the possibility for sub 10% growth. Customer and deal metrics were underwhelming. For example, revenue from >\$100K customer cohort decelerated to 7% from 10% on an easy comparison (16%/18% in F4Q23/F3Q23). This is indicative of a model that is still bottoming, as the company transitions to a new go-to-market under new leadership.

Leading indicators suggest model is perhaps bottoming

The leading indicators for growth are consistent with the trends noted above. Q4 cRPO of 22% decelerated from 23% in Q3 (on a 6% point easier comparison). However, the outlook for 11% revenue growth is backed by the assumption that cRPO growth will trough in Q2 and reaccelerate to a 20% exit rate in Q4, suggesting that growth is nearing the bottom. On margin, the FY24 outlook suggests that expectations are not a big delta to the target for break even by Q4FY25 (set forth at the 2022 analyst day).

New growth initiatives could reinvigorate growth

Plans to reinvigorate growth are comprehensive and include: 1) new go to market (simplified across infrastructure and security offerings), 2) process discipline (focus on sales operations and supporting technical resources), 3) emphasis on commercial differentiations, and 4) accelerated development of the cloud offering. The plans make sense, and we look for progress on these initiatives from here.

Maintain Neutral rating; pending progress on new plans

We have been steadfast in our view that HashiCorp's stack provides compelling value as the central console for cloud provisioning, management and security in complex enterprise environments. Choppy execution against a large market opportunity has held us back. New growth initiatives put into place have potential to drive improved execution. We look for progress in the coming quarters. We are raising our PO to \$28 from \$24 on the potential for improving growth, though remain on the sidelines with our Neutral view. Our new PO is based on 6x our C25e revenue (4.6x prior) or 0.4x adjusted for 16% growth, in line with the small cap software group (trading at 0.4x 12% growth).

Estimates (Jan) (US\$)	2023A	2024A	2025E	2026E	2027E
EPS	(0.55)	(80.0)	0.06	0.21	0.32
GAAP EPS	(1.31)	(0.98)	(0.79)	(0.69)	(0.64)
EPS Change (YoY)	-1.9%	85.5%	NM	250.0%	52.4%
Consensus EPS (Bloomberg)			0.13	0.29	NA
DPS	0	0	0	0	0
Valuation (Jan)					
P/E	NM	NM	399.3x	114.1x	74.9x
EV / EBITDA*	NM	NM	NM	NM	123.5x
Free Cash Flow Yield*	-1.7%	-0.2%	1.4%	1.8%	2.3%
* For full definitions of <i>IQ</i> method SM measures, see page 8.					

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Refer to important disclosures on page 9 to 11. Analyst Certification on page 6. Price
Objective Basis/Risk on page 6.

05 March 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	24.00	28.00
2025E Rev (m)	658.5	645.0
2026E Rev (m)	791.9	750.9
2027E Rev (m)	NA	910.0
2025E EPS	0.18	0.06
2026E EPS	0.40	0.21
2027E EPS	NA	0.32

Brad Sills Research Analyst BofAS +1 415 436 1400 brad.sills@bofa.com

Carly Liu Research Analyst BofAS +1 415 298 7319 carly.liu@bofa.com

Stock Data

23.96 USD
28.00 USD
5-Mar-2024
C-2-9
18.91 USD - 36.39 USD
4,915 USD / 205.1
95.1%
57.64 USD
HCP / NAS
HCP US / HCP.OQ
1.0%
-105.4%
NLA

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

cRPO = current remaining performance obligation

ARR = annual recurring revenue

NRR = net revenue retention

iQprofile[™] HashiCorp

<i>iQ</i> method sM − Bus Performance*					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Return on Capital Employed	-8.8%	-5.7%	-3.2%	-0.8%	0.8%
Return on Equity	-9.3%	-1.3%	1.0%	3.5%	5.29
Operating Margin	-26.3%	-13.6%	-6.9%	-1.5%	1.49
Free Cash Flow	(85)	(12)	68	89	11!
i Q method [™] – Quality of Earnings*					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Cash Realization Ratio	NM	NM	5.6x	2.1x	1.7
Asset Replacement Ratio	0.1x	0.1x	0.1x	0.1x	0.1
Tax Rate	NM	NM	NM	NM	N
Net Debt-to-Equity Ratio	-106.7%	-105.4%	-109.0%	-111.2%	-113.09
Interest Cover	NA	NA	NA	NA	N.
Income Statement Data (Jan)					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Sales	476	583	645	751	91
% Change	48.4%	22.5%	10.6%	16.4%	21.29
Gross Profit	404	493	544	619	73
% Change	48.6%	22.0%	10.5%	13.6%	18.29
EBITDA	(121)	(70)	(33)	3	2
% Change	-40.4%	42.1%	53.2%	NM	N
Net Interest & Other Income	(24)	(65)	(58)	(56)	(56
Net Income (Adjusted)	(115)	(16)	12	44	6
% Change	-30.2%	86.4%	NM	257.0%	55.49
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Net Income from Cont Operations (GAAP)	(322)	(320)	(275)	(253)	(24
Depreciation & Amortization	5	10	12	14	1
Change in Working Capital	11	10	45	32	3
Deferred Taxation Charge	NA 222	NA 200	NA 207	NA 207	N
Other Adjustments, Net	222 0	290	287	297	31
Capital Expenditure Free Cash Flow	- 85	(1) - 12	(1) 68	(1) 89	(1 11
% Change	-85 -50.1%	-12 86.4%	NM	30.6%	30.19
Share / Issue Repurchase	-30.1% 5	6	0	0	
Cost of Dividends Paid	0	0	0	0	
Change in Debt	0	0	0	0	
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Balance Sheet Data (Jan)					
(US\$ Millions)	2023A	2024A	2025E	2026E	2027
Cash & Equivalents	1,286	1,279	1,335	1,410	1,50
Trade Receivables	162	183	203	242	29
Other Current Assets	60	80	89	107	13
Property, Plant & Equipment	25	34	34	35	3
Other Non-Current Assets	95	116	125	143	16
Total Assets	1,628	1,692	1,786	1,937	2,13
Short-Term Debt	0	0	0	0	70
Other Current Liabilities	381	441	506	605	72
Long-Term Debt	0	0	0	0	7
Other Non-Current Liabilities Total Liabilities	42 423	38 479	55 561	63 668	7 79
Total Equity	423 1,205	1,213	1,225	1,268	1,33
	1 /03	1.213	1,225	1,200	1,33
Total Equity Total Equity & Liabilities	1,628	1,692	1,786	1,937	2,13

Company Sector

Server & Enterprise Software

Company Description

HashiCorp (NASDAQ: HCP) provides a consistent cloud operating model with workflows and a standardized approach to automating the critical processes involved in delivering applications in cloud: infrastructure provisioning, security, networking, and application deployment.

HashiCorp was founded in 2012 by Armon Dadgar (current CTO) and Mitchell Hashimoto (currently a director at the company). HashiCorp is headquartered in San Francisco, California, and operates as a remote-first company.

Investment Rationale

We rate HCP Neutral. HCP possesses compelling competitive advantages, including 1) large & active open source community, 2) ease of use & deployment, 3) a highly referenceable enterprise customer base, 4) enterprise grade scalability, security, & support, 5) flexible cloud deployment options, 6) a broad supporting ecosystem, & 7) a multichannel GTM. However, with near-term uncertainty with regard to macro, execution and the growth/margin profile, we are on the sidelines.

Stock Data

Average Daily Volume 2,405,818

Quarterly Earnings Estimates

	2024	2025
Q1	-0.07A	-0.01E
Q2	-0.10A	0E
Q3	0.03A	0.01E
Q4	0.05A	0.05E



Exhibits & Model

Earnings summary

Q4 total revenue of \$156 million (+15% y/y) exceeded our \$149 million, with subscription revenue of \$150 million (+14% y/y) above our \$145 million. Pro forma cRPO and current bookings of \$483.1 million (+22% y/y) / \$218 million (+14% y/y) is in line/above our \$483 million / \$211 million. The better bookings performance is driven by improving renewal and pipeline conversion activities in Q4. However, net revenue retention of 115% continued to decrease from 119% in Q3, signaling ongoing pressure on the extend/expand motion.

The company now has 4,423 total customers (+14% y/y), up from 4,354 in Q3, with 897 >\$100K in ARR versus 877 in Q3. ASP (average selling price) growth from customers >\$100K decelerated to 7% from 10% in Q3 on an easy comparison (16%/18% in F4Q23/F3Q23). Operating margin of -4% significantly exceeded our -10% from continued operational discipline.

Management guided Q1 revenue of \$152 million (+11% y/y), below with our \$154 million. Implied Q1 operating margin of (11%) is below our (8%). The initial FY25 guidance of \$645 million (+11% y/y) at the mid compares to our prior \$659 million. Management expects growth to trough in Q2 and start reaccelerating in the back half of this year. Commentary suggests cRPO growth to follow the same recovery shape and exit FY25 at 20% y/y. The implied full-year operation margin guidance of (6.9%) represents 670 bps margin expansion from FY24, reflecting continued focus on operational cost management.



Exhibit 1: VarianceTotal revenue of \$156 million came in 4% ahead of our estimate

\$ in Thousands	BofA	4Q24	Variance
(except per share data)	Estimates	Actuals	
Subscription	\$145,391	\$150,004	3.2%
Professional Services	\$3,975	\$5,779	45.4%
Total revenue	\$149,367	\$155,783	4.3%
Cost of revenues	\$21,033	\$22,333	6.2%
Gross Profit	\$128,333	\$133,450	4.0%
Operating Expenses			
Sales and marketing	\$76,440	\$76,646	0.3%
Research and development	\$43,964	\$41,949	-4.6%
General and administrative	\$22,421	\$21,390	-4.6%
Total Operating Expenses	\$142,826	\$139,907	-2.0%
Operating Income (loss)	(\$14,493)	(\$6,457)	-55.4%
Interest and other income (expense), net	\$16,358	\$17,239	5.4%
Income (loss) before provision for income taxes	\$1,865	\$10,782	478.0%
Provision for income taxes	\$258	\$559	116.7%
Net Income - Pro forma	\$1,607	\$10,223	536.0%
EPS (diluted) - Pro forma	\$0.01	\$0.05	535.6%
Net Income - GAAP	(\$43,034)	(\$31,622)	-26.5%
EPS (diluted) - GAAP	(\$0.21)	(\$0.16)	-23.6%
Shares outstanding (mn; diluted)	205.0	205.1	0.1%
Growth Analysis - Y-Y			
Subscription	10%	13%	3.5%
Professional Services	10%	60%	49.9%
Total Revenues	10%	15%	4.7%
Margin Analysis			
PF gross margin	85.9%	85.7%	-0.3%
Sales and marketing	51.2%	49.2%	-2.0%
Research and development	29.4%	26.9%	-2.5%
General and administrative	15.0%	13.7%	-1.3%
PF Operating Margin	-9.7%	-4.1%	5.6%
Tax rate - pro forma	13.8%	5.2%	-8.6%
PF Net Margin	1.1%	6.6%	5.5%
Key Metrics			
PF RPO	\$803,774	\$801,377	-0.3%
y/y	19.3%	18.9%	-0.4%
Bookings	\$252,739	\$256,758	1.6%
y/y	-1.3%	0.2%	1.6%
PF cRPO	\$482,887	\$483,052	0.0%
y/y	21.4%	21.5%	0.0%
Current bookings	\$211,470	\$218,051	3.1%
y/y	10.1%	13.6%	3.4%
Balance Sheet & Cash Flow Data			
Cash & equivalents	\$1,264,234	\$1,278,577	1.1%
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Deferred revenue	\$362,753	\$361,553	-0.3%
Deferred revenue Billings			
	\$362,753	\$361,553	-0.3% 1.3% -11.2%

Source: BofA Global Research, company filings

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Exhibit 2: Estimate revision

Q1 guidance came in slightly below with our previous estimate

		1Q25	5E		2025E				2026E			
	Previous	Previous	New	New Y/Y	Previous	Previous	New	New Y/Y	Previous	Previous	New	New Y/Y
	Estimate	Y/Y Growth	Estimate	Growth	Estimate	Y/Y Growth	Estimate	Growth	Estimate	Y/Y Growth	Estimate	Growth
Subscription	\$149,649	12.0%	\$147,645	10.5%	\$640,156	14.3%	\$624,698	10.6%	\$771,725	20.6%	\$728,501	16.6%
Professional Services	\$4,805	10.0%	\$4,805	10.0%	\$18,356	10.0%	\$20,340	10.0%	\$20,192	10.0%	\$22,374	10.0%
Total revenue	\$154,454	11.9%	\$152,449	10.5%	\$658,512	14.2%	\$645,038	10.6%	\$791,917	20.3%	\$750,876	16.4%
Operating Income (loss)	(\$12,978)	-52.4%	(\$17,372)	-36.3%	(\$26,308)	-69.9%	(\$44,762)	-43.6%	\$20,793	-179.0%	(\$11,496)	-74.3%
Net Income - Pro forma	\$3,080	-124.2%	(\$1,509)	-88.1%	\$37,924	-255.7%	\$12,201	-177.5%	\$85,025	124.2%	\$43,304	254.9%
Pro forma EPS	\$0.01		(\$0.01)		\$0.18	***	\$0.06		\$0.40		\$0.21	***

Source: BofA Global Research

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Exhibit 3: Small cap software group comp sheetThe small cap software group is trading at 4.1x C25e Sales, or 0.4x on a growth adjusted basis

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			Сар	EV/2023	EV/2024	EV/2025	EV/Rev/	EV/Rev/		EV/2023	EV/2024	EV/2025	EV/FCF/	EV/FCF/	EV/FCF/
	Company	Price	(\$mn)	Sales	Sales	Sales	Growth	Growth	Growth	FCF	FCF	FCF	Growth	Growth	Growth
Al	C3.AI INC-A	\$30.91	3,724	10.4x	8.9x	7.8x	1.0x	0.5x	0.5x			61.8x			
ALRM	ALARM.COM HOLDINGS INC	\$72.89	3,988	4.3x	4.1x	3.9x	0.9x	0.9x	0.6x	29.7x	60.8x	24.7x	0.1x		0.2x
AMPL	AMPLITUDE INC-CLASS A	\$10.99	1,604	4.7x	4.4x	4.2x	0.3x	0.8x	0.7x	53.0x	63.2x	46.2x			1.3x
ASAN	ASANA INC - CL A	\$18.07	4,007	5.8x	5.1x	4.2x	0.3x	0.4x	0.2x			44.2x			0.3x
AVDX	AVIDXCHANGE	\$12.39	2,478	5.8x	5.1x	4.4x	0.3x	0.4x	0.3x			44.5x			0.2x
AYX	ALTERYX INC - CLASS A	\$48.05	3,693	4.5x	4.0x	3.6x	0.4x	0.4x	0.3x		80.3x	39.7x		0.7x	0.4x
BIGC	BIGCOMMERCE HOLDINGS-SER 1	\$7.21	548	2.0x	1.9x	1.8x	0.2x	0.3x	0.3x		99.8x	42.0x			0.3x
BL	BLACKLINE INC	\$62.78	4,681	7.9x	7.2x	6.6x	0.6x	0.8x	0.8x	38.4x	33.8x	29.5x	0.2x	2.4x	2.1x
BLKB	BLACKBAUD INC	\$71.56	3,805	4.2x	3.9x	3.6x	0.9x	0.5x	0.5x	33.9x	17.4x	15.5x	16.9x	0.2x	1.3x
EGHT	8X8 INC	\$2.70	330	1.0x	1.0x	0.9x			0.2x	6.5x	4.3x	3.5x	0.0x	0.1x	0.1x
ENFN	ENFUSION	\$8.37	1,069	6.1x	5.2x	4.5x	0.4x	0.3x	0.3x	55.0x	50.7x	34.2x	0.3x	6.0x	0.7x
EVBG	EVERBRIDGE INC	\$35.28	1,553	4.0x	3.8x	3.6x	1.1x	0.7x	0.6x	67.0x	42.7x	30.1x	0.0x	0.7x	0.7x
FROG	JFROG LTD	\$40.82	4,498	11.4x	9.3x	7.6x	0.5x	0.4x	0.4x	55.1x	53.7x	41.4x	0.2x	20.8x	1.4x
HCP	HASHICORP INC-CL A	\$23.73	4,618	5.9x	5.1x	4.3x	0.3x	0.4x	0.2x		40.7x	26.6x			0.5x
INTA	INTAPP INC	\$36.12	2,874	7.0x	6.0x	5.1x	0.3x	0.4x	0.3x	75.9x	48.7x	35.5x	0.8x	0.9x	1.0x
JAMF	JAMF HOLDING CORP	\$17.05	2,318	4.4x	4.0x	3.7x	0.3x	0.4x	0.4x	74.6x	44.6x	34.9x		0.7x	1.3x
LAW	CS DISCO INC	\$6.35	412	1.9x	1.8x	1.6x	0.9x	0.2x	0.2x						
LSPD	LIGHTSPEED COMMERCE INC	\$13.67	2,098	1.6x	1.3x	1.1x	0.1x	0.1x	0.1x		35.3x	37.9x			
MLNK	MERIDIANLINK INC	\$18.81	1,525	6.1x	5.7x	5.4x	1.1x	1.0x	0.8x	26.4x	20.4x	18.0x		0.7x	1.3x
NCNO	NCINO INC	\$28.77	3,250	6.7x	5.9x	5.1x	0.4x	0.4x	0.3x	44.1x	39.5x	39.7x		3.4x	
PD	PAGERDUTY INC	\$22.97	2,211	4.9x	4.4x	3.9x	0.3x	0.4x	0.3x	29.8x	22.3x	17.9x	0.1x	0.7x	0.7x
PWSC	POWERSCHOOL HOLDINGS INC-A	\$20.23	4,113	7.0x	6.2x	5.7x	0.7x	0.5x	0.6x	29.2x	24.8x	21.9x	1.8x	1.4x	1.6x
RNG	RINGCENTRAL INC-CLASS A	\$31.39	2,951	2.0x	1.8x	1.7x	0.2x	0.2x	0.2x	13.3x	11.8x	8.3x	0.1x	0.9x	0.2x
VERX	VERTEX INC - CLASS A	\$29.70	4,550	8.1x	7.2x	6.4x	0.6x	0.6x	0.5x		66.8x	47.3x		1.2x	1.1x
WEAV	WEAVE COMMUNICATIONS INC	\$12.13	783	4.3x	3.7x	3.2x	0.2x	0.2x	0.2x	86.1x	39.2x	21.4x		0.3x	0.3x
ZETA	ZETA GLOBAL HOLDINGS CORP-A	\$9.99	2,162	3.0x	2.5x	2.2x	0.1x	0.1x	0.2x	31.6x	18.7x	14.4x	1.3x	0.3x	0.5x
Average				5.2x	4.6x	4.1x	0.5x	0.4x	0.4x	44.1x	41.8x	31.2x	1.8x	2.4x	0.8x
Median				4.8x	4.4x	4.0x	0.4x	0.4x	0.3x	38.4x	40.1x	34.2x	0.2x	0.7x	0.7x

Source: BofA Global Research, Bloomberg

Note: Stock price as of 3/5/24

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Price objective basis & risk

HashiCorp (HCP)

Our PO of \$28 is based on EV/sales of 6x our CY25e Sales, or 0.4x our C25 revenue growth rate of 16%, in line with the small cap peers at 0.4x (12% growth).

Upside risk to our PO is that HashiCorp shares trade in line with the software group. In the event of changes to market sentiment on macro abating and IT spend returning to normal, shares could rerate.

Downside risks to our PO are: 1) It has high exposure to cyclical trends of application software spend. Enterprise application software has proven to be highly cyclical. During an economic slowdown, when firms are faced with shrinking IT budgets, application upgrades, migrations, or new installations are often deferred, which could present a high degree of risk for bookings deceleration. 2) HashiCorp competes against deep-pocketed platform vendors, such as the major cloud providers as well as point solutions, and thus the absence of ongoing feature and capability enhancement may slow share gains.

Analyst Certification

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

US - Enterprise Software Coverage Cluster

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



US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Zeta Global	ZETA	ZETA US	Koji Ikeda, CFA
	ZoomInfo	ZI	ZI US	Koji Ikeda, CFA
NEUTRAL				,
	Autodesk	ADSK	ADSK US	Michael J. Funk
	Bentley Systems	BSY	BSY US	Michael J. Funk
	BigCommerce Holdings, Inc.	BIGC	BIGC US	Koji Ikeda, CFA
	Coveo	YCVO	CVO CN	Koji Ikeda, CFA
	Datadog Inc	DDOG	DDOG US	Koji Ikeda, CFA
	DocuSign	DOCU	DOCU US	Brad Sills
	Freshworks, Inc.	FRSH	FRSH US	Adam Bergere
	HashiCorp	HCP	HCP US	Brad Sills
	Jamf	JAMF	JAMF US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	LSPD	LSPD US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	YLSPD	LSPD CN	Koji Ikeda, CFA
	Oracle Corporation	ORCL	ORCL US	Brad Sills
	Paycom	PAYC	PAYC US	Adam Bergere
	Paylocity	PCTY	PCTY US	Adam Bergere
	Shopify, Inc.	SHOP	SHOP US	Brad Sills
	Snowflake	SNOW	SNOW US	Brad Sills
	Veeva Systems, Inc.	VEEV	VEEV US	Brad Sills
	Vertex, Inc.	VERX	VERX US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
UNDERPERFORM		- · ·	=	
ONDERFERI ORM	AvidXchange, Inc.	AVDX	AVDX US	Brad Sills
	Blackbaud, Inc.	BLKB	BLKB US	Koji Ikeda, CFA
	BlackLine, Inc.	BL	BL US	Koji Ikeda, CFA
	C3.ai	Al	AI US	Brad Sills
	Confluent	CFLT	CFLT US	Brad Sills
	CS Disco, Inc.	LAW	LAW US	Koji Ikeda, CFA
	Dropbox	DBX	DBX US	Michael J. Funk
	Enfusion, Inc.	ENFN	ENFN US	Koji Ikeda, CFA
	Five9	FIVN	FIVN US	Michael J. Funk
	Guidewire Software, Inc.	GWRE	GWRE US	Michael J. Funk
	Smartsheet	SMAR	SMAR US	Michael J. Funk
	Twilio	TWLO	TWLO US	Michael J. Funk
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RSTR				
	Splunk	SPLK	SPLK US	Brad Sills



IQmethod[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) \times (1 $-$ Tax Rate) + Goodwill Amortization	Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations – Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt — Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations — Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	$EV = CurrentSharePrice \times CurrentShares + MinorityEquity + NetDebt + \\OtherLTLiabilities$	Sales

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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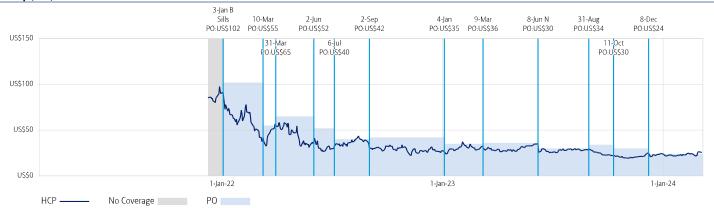
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HashiCorp (HCP) Price Chart



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

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

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

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

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

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

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

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