

CCC Intelligent Solutions

4Q23 Wrap: Firing on all cylinders

Reiterate Rating: BUY | PO: 15.00 USD | Price: 11.60 USD

FY24 outlook/commentary supportive of mult expansion

We find little to criticize about CCCS' 4Q23 results and FY24 outlook. The company's guidance assumes an increasing contribution to growth from emerging solutions (was 1% in '23), which we view as a bullish signal for long-term growth trajectory. We are also encouraged by the positive inflection of the company's GDR and NDR metrics which suggest an improving operating environment. In addition, we also view CCCS' progress in addressing key bear points including low float via secondary offerings favorably. Reiterate Buy.

Results beat across the board, FY24 Guide above Street

CCCS reported 4Q23 results that beat consensus on revenue (by 2.6%) and adjusted EBITDA (by 7.6%). Cross-sell/up-sell drove the revenue beat (9pts of growth), with solid contribution from new logo additions (3pts) and emerging solutions like Estimate STP and Diagnostics (1pt). Software net dollar retention (NDR) of 108% inflected positively, increasing 1% Q/Q from 107% in the prior quarter, as did software gross dollar retention (GDR) which increased 1% Q/Q to 99%.

Increasing revenue and EBITDA estimates

We are increasing our FY24 revenue and adjusted EBITDA estimates by 1% and 5% respectively given continued execution and bullish management commentary. We view topline guidance as conservative, and see a path to growth acceleration exiting 2024 as emerging solutions like Diagnostics and Estimate STP (straight through processing) scale

Reiterate Buy rating, increasing PO to \$15 (from \$14)

We increase our estimates and our PO to \$15 (from \$14), based on an EV/revenue multiple of 9.4x our CY25e revenue estimate (from 9.5x CY24, we roll forward our multiple and adjust for continued execution). The 9.4x multiple represents an EV/revenue/growth multiple of 1.1x, which is above the less than 10% growth and vertical software peers at 0.4x and 0.5x, respectively. We believe CCCS' level of profitability, high visibility revenue stream, and less dependence on new customer acquisition for growth warrant a premium valuation.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E					
EPS	0.24	0.28	0.33	0.39	0.43					
GAAP EPS	(0.43)	0.06	(0.14)	0.09	0.11					
EPS Change (YoY)	50.0%	16.7%	17.9%	18.2%	10.3%					
Consensus EPS (Bloomberg)			0.32	0.35	0.40					
DPS	0.47	0	0	0	0					
Valuation (Dec)										
P/E	48.3x	41.4x	35.2x	29.7x	27.0x					
GAAP P/E	NM	193.3x	NM	128.9x	105.5x					
Dividend Yield	4.0%	0%	0%	0%	0%					
EV / EBITDA*	30.6x	26.2x	22.6x	20.4x	18.3x					
Free Cash Flow Yield*	1.3%	2.1%	2.8%	3.5%	4.1%					
* For full definitions of <i>iQ</i> method SM measures, see page 10.	For full definitions of <i>IQ</i> method ^{≤M} measures, see page 10.									

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Refer to important disclosures on page 11 to 13. Analyst Certification on page 8. Price
Objective Basis/Risk on page 8.

Timestamp: 28 February 2024 07:57PM EST

28 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	14.00	15.00
2023E Rev (m)	860.7	866.4
2024E Rev (m)	936.4	947.9
2025E Rev (m)	1,018.2	1,030.8
2023E EPS	0.32	0.33
2024E EPS	0.34	0.39
2025E EPS	0.10	0.43

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Stock Data

Price	11.60 USD
Price Objective	15.00 USD
Date Established	28-Feb-2024
Investment Opinion	B-1-9
52-Week Range	8.33 USD - 13.41 USD
Mrkt Val (mn) / Shares Out	7,069 USD / 609.4
(mn)	
Free Float	51.1%
Average Daily Value (mn)	20.04 USD
BofA Ticker / Exchange	CCCS / NYS
Bloomberg / Reuters	CCCS US / CCCS.OQ
ROE (2023E)	11.1%
Net Dbt to Eqty (Dec-2022A)	22.3%
ESGMeter™	Medium

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".

iQprofile[™]CCC Intelligent Solutions

<i>iQ</i> method [™] – Bus Performance*					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Return on Capital Employed	6.3%	6.8%	9.3%	7.1%	6.3%
Return on Equity	8.5%	9.2%	11.1%	12.6%	12.4%
Operating Margin	34.4%	35.8%	36.4%	38.8%	39.9%
Free Cash Flow	89	152	195	249	288

*i***Q**method SM − **Quality of Earnings***

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash Realization Ratio	0.9x	1.1x	1.2x	1.3x	1.3x
Asset Replacement Ratio	1.6x	1.7x	1.5x	2.2x	2.2x
Tax Rate	18.0%	22.4%	NM	40.4%	47.7%
Net Debt-to-Equity Ratio	32.1%	22.3%	32.2%	14.7%	0%
Interest Cover	4.0x	7.3x	7.4x	10.8x	12.4x

Income Statement Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Sales	688	782	866	948	1,031
% Change	13.4%	13.7%	10.7%	9.4%	8.7%
Gross Profit	534	605	672	734	807
% Change	19.2%	13.4%	11.1%	9.2%	9.9%
EBITDA	261	305	353	392	437
% Change	28.9%	16.8%	15.7%	10.8%	11.6%
Net Interest & Other Income	(59)	(37)	(40)	(39)	(39)
Net Income (Adjusted)	138	180	212	244	280
% Change	66.0%	30.1%	17.7%	15.2%	14.7%

Free Cash Flow Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Income from Cont Operations (GAAP)	(119)	40	(90)	55	70
Depreciation & Amortization	24	28	37	28	31
Change in Working Capital	(44)	(14)	(1)	(45)	(8)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	266	146	304	273	262
Capital Expenditure	(38)	(48)	(55)	(62)	(67)
Free Cash Flow	89	152	195	249	288
% Change	20.6%	70.7%	28.3%	27.9%	15.7%
Share / Issue Repurchase	6	28	(303)	21	20
Cost of Dividends Paid	(269)	0	0	0	0
Change in Debt	(546)	(8)	(8)	(9)	(8)

Balance Sheet Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Cash & Equivalents	183	324	196	457	757
Trade Receivables	79	98	102	112	122
Other Current Assets	62	57	52	57	62
Property, Plant & Equipment	136	146	160	195	231
Other Non-Current Assets	2,779	2,725	2,541	2,579	2,591
Total Assets	3,238	3,351	3,051	3,400	3,764
Short-Term Debt	8	8	8	8	8
Other Current Liabilities	129	144	145	152	165
Long-Term Debt	781	774	768	758	750
Other Non-Current Liabilities	434	366	332	369	398
Total Liabilities	1,351	1,291	1,252	1,287	1,321
Total Equity	1,886	2,059	1,799	2,112	2,441
Total Equity & Liabilities	3,238	3,351	3,051	3,399	3,763

^{*} For full definitions of $\emph{IQ} \textit{method}^{\text{SM}}$ measures, see page 10.

Company Sector

Server & Enterprise Software

Company Description

CCC provides software as a service (SaaS)-based solutions to the property and casualty (P&C) industry that digitize insurer workflows, enhance original equipment manufacturer (OEM) value and customer experience across vehicle lifecycle, and assist repair facilities in managing repairs and e-commerce solutions to enable parts sales across the CCC network. CCC has more than 300 insurers on its network and connects to more than 27k repair facilities.

Investment Rationale

CCC is a leading provider of mission-critical SaaS solutions for the property and casualty (P&C) insurance economy with a recurring subscription base business serving a durable end market. Ninety-six percent of CCC revenue is recurring with average contract lengths of 3-5 years, strong FCF, and positive EBITDA and stronger margin vs. peers.

Stock Data

Average Daily Volume	1,727,878

Quarterly Earnings Estimates

	2022	2023
Q1	0.08A	0.07A
Q2	0.06A	0.07A
Q3	0.07A	0.09A
Q4	0.07A	0.10E



Results beat, guidance above Street

CCCS reported solid 4Q23 results with better than projected total revenue of \$228.6mn (+12.0% YoY) vs our \$222.9mn and consensus of \$222.8mn. Non-GAAP operating margin of 39.7% increased 430bps YoY and was above consensus of 37.5%. Software gross dollar retention (GDR) was 99%, up from 98% in 3Q23, and software net dollar retention (NDR) was 108%, up 1% Q/Q (from 107% in 3Q23). CCCS introduced full-year 2024 revenue and adjusted EBITDA guidance of \$946mn (Street at \$934.4mn) and \$391mn (Street at \$383.1mn) at the mid, respectively. In addition, CCCS introduced 1Q24 revenue guidance of \$225.3mn (+9.9% Y/Y), slightly ahead of BofA and the Street at \$223.4mn/\$223.5mn, and adjusted EBITDA guidance of \$91.3mn, ahead of BofA and the Street at \$87.1mn/\$89.6mn.

Exhibit 1: CCCS beat our revenue estimate by 2.6%

Variance analysis

\$ in Thousands	4Q23 Actuals	BofA Estimates	Variance (abs)	Variance (%)
Total Revenue	228,601	222,884	5,717	2.6%
Total Cost of revenue	47,147	51,263	(4,116)	-8.0%
Adjusted Gross Profit	181,454	171,620	9,834	5.7%
Operating Expenses				
Research & Development	38,581	36,776	1,805	4.9%
Sales & Marketing	27,839	25,632	2,207	8.6%
General & Administrative	24,387	24,517	(130)	-0.5%
Total Operating Expenses	90,807	86,925	3,882	4.5%
Operating income	90,647	84,696	5,951	7.0%
Adj. EBITDA	100,053	92,665	7,388	8.0%
Earnings (loss) before income taxes	80,346	75,581	4,765	6.3%
Net income	58,992	56,686	2,306	
PF EPS	0.10	0.09	0.01	13.4%
Basic shares outstanding	609,128	631,226	(22,098)	-3.5%
Diluted shares outstanding	609,387	664,146	(54,759)	-8.2%
Growth Analysts Y-Y				
Total Revenue	12.0%	9.2%	2.8%	30.4%
Gross profit	15.4%	9.1%	6.3%	68.4%
Operating Income	25.6%	17.3%		47.5%
Net Income	34.2%	28.9%	5.2%	18.1%
Margin Analysis				
Gross Margin	79.4%	77.0%		3.1%
Sales & Marketing	12.2%	11.5%		5.9%
Research & Development	16.9%	16.5%	0.4%	2.3%
General & Administrative	10.7%	11.0%	-0.3%	-3.0%
Operating Margin	39.7%	38.0%		4.3%
EBITDA margin	43.8%	41.6%		5.3%
Net Margin	25.8%	25.4%	0.4%	1.5%
Balance Sheet & Cash Flow Analysis				
Cash & equivalents	195,572	522,935	(327,363)	-63%
Cash flow from operations	86,896	83,268	3,628	4%
Free Cash flow	75,051	69,895	5,156	7%

Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH



Exhibit 2: We are increasing our FY24 revenue and EBITDA estimates

Estimate changes

	1Q24E				2024E			2025E				
	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
Total Revenue	\$223,362	9.0%	\$225,411	10.0%	\$936,353	8.8%	\$947,916	9.4%	\$1,018,237	8.7%	\$1,030,818	8.7%
Gross Profit	\$170,872	9.1%	\$173,566	10.8%	\$724,236	9.3%	\$734,338	9.2%	\$789,275	9.0%	\$806,795	9.9%
Operating income	\$80,187	14.1%	\$85,882	22.2%	\$343,367	10.9%	\$368,113	16.7%	\$378,154	10.1%	\$411,434	11.8%
Adj. EBITDA	\$87,068	9.5%	\$91,841	15.5%	\$372,220	7.6%	\$391,650	10.8%	\$409,465	10.0%	\$436,968	11.6%

Source: BofA Global Research estimtes

BofA GLOBAL RESEARCH

Exhibit 3: CCCS reported \$866.4mn in 2023 revenues

Income statement

\$ Thousands	YEAR	YEAR	Mar	June	Sept	Dec	YEAR	Mar	June	Sept	Dec	YEAR	YEAR	YEAR
	FY21A	FY22A	1Q23A	2Q23A	3Q23A	4Q23A	FY23A	1Q24E	2Q24E	3Q24E	4Q24E	FY24E	FY25E	FY26E
	688,28	782,44	204,91	211,71	221,14	228,60	866,37	225,41	231,82	241,05	249,63	947,91	1,030,81	1,120,98
Total Revenue	9	9	9	0	7	1	7	1	2	0	2	6	8	8
Y/Y rev growth	13%	14%	10%	9.8%	11.3%	12.0%	10.7%	10%	10%	9%	9%	9.4%	8.7%	8.7%
Q/Q rev growth			0%	3%	4%	3%		-1%	3%	4%	4%			
Cost of Revenue												040 ==		
Cost of vovement analysis of amount	1 - 4 700	177.004	40 221	49,689	49,027	47,147	194,194	F1 04F	53,783	F2 021	54,919	213,57 7	224,023	220,020
Cost of revenues, exclusive of amort.	154,780	177,004	46,331	49,089	49,027	4/,14/	194,194	51,845	55,765	55,051	54,919	′	224,023	238,028
Amort. of Acquired Technologies	15470	177.66	-	-	-	-	194.19	_	_	-	-	- 213,57	-	_
Total cost of revenue	6	4	40 221	10.690	49,027	47 147	4	51,845	E2 702	E3 031	E4 010	7	224.023	238,028
local cost of revenue	0	~	40,331	45,005	43,027	47,147	4	31,043	33,763	33,031	34,313	′	224,023	230,020
	533,50	604,78	156 58	162 02	172 12	181 45	672 18	173,56	178 04	188 01	19471	734,33		
Gross profit	3	5	8	1	0	4	3	6	0	9	3	8	806.795	882,960
januar promo				·	•					•	-			
Operating expenses														
Research & Development	125,309	137,422	35,121	36,763	37,173	38,581	147,638	37,193	37,092	39,291	39,941	153,517	166,116	179,523
Sales & Marketing	83,816	94,285	26,273	27,187	26,348	27,839	107,647	27,049	27,819	29,167	29,457	113,492	122,383	131,965
General & Administrative	87,537	93,083	24,918	26,247	25,913	24,387	101,465	23,443	25,500	25,310	24,963	99,217	106,862	115,088
	296,66	324,79					356,75					366,22		
Total operating expenses	2	0	86,312	90,197	89,434	90,807	0	87,685	90,411	93,769	94,361	5	395,361	426,576
	236,84						315,43				100,35			
Operating income	1	7	70,276	71,824	82,686	90,647		85,882	87,629	94,251	2	3	411,434	456,385
							36.4%					38.8%	39.9%	40.7%
	261,40					100,05				•	106,10	1		
Adj. EBITDA	3	9	79,536	80,899	92,927	3	5	91,841	93,567	3	9	0	436,968	484,514
	38%	17%					16%							
Other Income/Expense	111	699	54	315	182	2,545	3,096	(803)	. , ,	(1,350)	. , ,	(4,901)	(5,390)	(5,501)
Interest expense			(10,573)	(9,991)	(9,468)	(12,846)	(42,878)	(8,843)	(8,607)	(8,375)	(8,349)	(34,173)	(33,132)	(32,712)
_ , , , , , , , ,	177,96		-0	60 1 10	70.400	00046	275,65	75.005	70.006	04506	00 071	329,03	272.012	410170
Earnings (loss) before income taxes	3	4	59,/5/	62,148	73,400	80,346	1	/6,236	78,006	84,526	90,271	9	372,912	418,172
Provision for income taxes (benefit)	(47.684)	(62.516)	(13.263)	(14.306)	(16.239)	(21.354)	(65.162)	(19.059)	(19.501)	(21.132)	(22.568)	(82,260)	(93,228)	(104,543)
(130.27	176,84	(, /	(, /	(,== -)	(= :,= = :)	210.48	(,)	(, ,	(= :, : = =)	(==,===)	246.77	(==,===)	(, ,
Net income	9	8	46,494	47.842	57,161	58.992	9	57.177	58.504	63,395	67.703	9	279.684	313,629
PF EPS	0.24	0.28	0.07	0.07	0.09	0.10	0.33	0.09	0.09	0.10	0.11	0.39	0.43	0.46
Basic shares outstanding	543,558							615,219				624,509	649,867	676,254
Diluted shares outstanding	,	, .										624,775	650,144	676,542

Source: BofA Global Research estimtes, company filings



Exhibit 4: CCCS ended 2023 with \$195.5mn in cash

Balance sheet

\$ Thousands	YEAR	YEAR	YEAR	Mar	June	Sept	Dec	YEAR	YEAR	YEAR
	FY21A	FY22A	FY23A	1Q24E	2Q24E	3Q24E	4Q24E	FY24E	FY25E	FY26E
Assets										
Cash and cash equivalents	182,544	323,788	195,572	221,355	282,826	371,777	457,027	457,027	757,487	1,082,470
Account receivables, net	78,793	98,353	102,365	117,214	129,821	108,473	112,335	112,335	122,445	133,465
Income taxes receivable	318	4,015	1,798	1,798	1,798	1,798	1,798	1,798	1,798	1,798
Deferred contract cost	15,069	16,556	17,900	16,906	17,387	18,802	19,471	19,471	21,224	23,134
Other current assets	46,181	36,358	32,364	38,243	32,018	32,497	35,341	35,341	38,522	41,989
										1,282,85
Total current assets	322,905	479,070	349,999	395,516	463,849	533,346	625,972	625,972	941,475	6
Software, Equipment, & Property, net	135,845	146,443	160,416	167,919	174,874	184,516	194,501	194,501	230,750	270,157
Operating lease	37,234	32,874	30,456	58,607	60,274	60,263	62,408	62,408	68,025	74,147
Intangible Assets, net	1,213,249	1,118,819	1,015,046	1,015,046	1,015,046	1,015,046	1,015,046	1,015,046	1,015,046	1,015,046
Goodwill	1,466,884	1,495,129	1,417,724	1,417,724	1,417,724	1,417,724	1,417,724	1,417,724	1,417,724	1,417,724
Deferred Financing fees	2,899	2,286	1,672	1,672	1,672	1,672	1,672	1,672	1,672	1,672
Deferred contract costs	22,117	20,161	22,302	20,287	20,864	24,105	24,963	24,963	27,210	29,659
Equity Method Investment	10,228	10,228	10,228	10,228	10,228	10,228	10,228	10,228	10,228	10,228
Other assets	26,165	45,911	43,197	56,945	57,019	54,364	47,171	47,171	51,417	56,044
	3,237,52	3,350,92	, .	, .	,	,	,	,	,	4,157,53
Total assets	6	1	3.051.040	3,143,943	3,221,550	3,301,264	3,399,686	3,399,686	3,763,547	3
Liabilities			•	, ,	, ,		, ,	' '	•	
Accounts payable	12,918	27,599	16,324	24,795	25,500	24,105	24,963	24,963	27,210	44,488
Accrued expenses	66,691	71,445	71,478	49,590	53,319	55,442	61,160	61,160	66,664	72,664
Income taxes payable	7,243	922	3,689	5,861	6.027	8,437	8,737	8,737	9,523	10,381
Current portion of LT debt	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Current portion of LT lic agrmt	2,703	2,876	3,061	3,061	3,061	3,061	3,061	3,061	3,061	3,061
Operating lease liabilities	8,052	5,484	6,788	14,652	15,068	12,053	12,482	12,482	13,605	14,829
Deferred revenues	31,042	35,239	43,567	39,447	40,569	39,773	41,189	41,189	44,896	48,937
Interest rate swap derivatives	-	-	-	-	-	-	-	-	-	_
Total current liabilities	136,649	151,565	152,907	145,406	151,545	150,870	159,592	159,592	172,960	202,360
First lien term loan, net	-	-	-	-	-	-	-	-	-	-
Term B Loan, net	780,610	774,132	767,504	764,461	762,461	760,461	758,461	758,461	750,461	742,461
Deferred income taxes, net	275,745	241,698	195,365	221,966	218,904	222,496	231,324	231,324	254,293	276,007
Long-term licensing agreement, net	33,629	30,752	27,692	27,692	27,692	27,692	27,692	27,692	27,692	27,692
Operating lease liabilities	56,133	54,245	50,796	50,796	50,796	50,796	50,796	50,796	50,796	50,796
Warrant liabilities	62,478	36,405	51,501	51,501	51,501	51,501	51,501	51,501	51,501	51,501
Other liabilities	5,785	2,658	6,414	6,762	6,955	7,232	7,489	7,489	13,605	11,864
o area madimenes	1,351,02	1,291,45	0,	0,7 02	0,333	,,232	7,103	7,103	13,003	1,362,68
Total liabilities	9	5	1.252.179	1.268.584	1.269.854	1.271.047	1,286,855	1,286,855	1,321,308	1
Mezzanine Equity			1,232,173	1,200,301	1,205,051	1,27 1,0 17	1,200,055	1,200,033	1,521,500	
Redeemable non-controlling interest	14,179	14,179	16,584	16,584	16,584	16,584	16,584	16,584	16,584	16,584
Stockholders' Equity	,	,	. 0,50 .	. 0,50 .	. 0,50 .	. 0,50 .	. 0,50 .	. 0,50 .	. 0,50 .	. 0,50 .
Common Stock issued	61	62	60	60	60	60	60	60	60	60
Additional paid-in capital	_	2,754,055	2,909,757			3,099,936		3,168,108	3,427,513	
Accumulated deficit	(746,352)	(707,946)					(1,071,590)			
AOCI	(315)	(884)	(1,073)	(1,103,030)	(1,037,233)	(1,000,033)	(1,071,330)	(1,071,330)	(1,001,307)	(1,073)
noci	1,886,49	2,059,46	(1,073)	(1,075)	(1,073)	(1,073)	(1,075)	(1,075)	(1,073)	2,794,11
Total Stockholders' equity	7	6	1 798 861	1 874 617	1 950 953	2 029 474	2,112,089	2 112 089	2 441 407	0
Total Stockholders equity		3,350,92	1,,, 50,001	1,07-1,017	درد,٥٥٥,٠	∠,∪∠J,⊤/ 1	2,112,003	2,112,003	,-,1, 3/	4,157,53
Liabilities + shareholder's equity	6	1	3 051 040	3 143 043	3 221 550	3 301 264	3,399,686	3 300 686	3 763 547	3
Liavillues + Shareholder 5 equity	ں ا	<u> </u>	1,040	ر73,343 روا	J,221,JJU	1,204 مرد	000,55,000	000,555رد	/ ۵۲,۸۱۸	ر ا

Source: BofA Global Research estimtes, company filings



Exhibit 5: CCCS generated \$250mn in CFO during 2023 Cash flow statement

\$ Thousands	YEAR	YEAR	YEAR	Mar	June	Sept	Dec	YEAR	YEAR	YEAR
CAADA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	FY21A	FY22A	FY23A		2Q24E			FY24E	FY25E	FY26E
GAAP Net income (loss)	(248,919)	38,406	(90,070)			11,220		54,877	70,003	82,320
D&A of software, equipment, and property	24,451	27,933	36,902	6,762	6,955	7,232	7,489	28,437	30,925	33,630
Amortization of intangible assets	98,678	99,216	98,436	20,192	20,192	20,192	20,192	80,768	72,454	72,454
Impairment	/		82,742		(0.004)			-	-	-
Deferred income taxes	(46,883)	(34,401)	(46,333)	26,601	(3,061)	3,592	8,828	35,959	22,969	21,715
Stock-based compensation	261,995	109,497	144,518	31,481	38,162	42,605	42,982	155,231	165,683	176,779
Amortization of deferred financing fees	3,682	1,878	1,753	243	243	243	243	970	970	970
Amortization of discount on debt	604	257	233	58	59	60	60	237	238	238
Change in fair value of interest rate swaps	(8,373)	(5,663)	5,743	-	-	-	-	-	-	-
Change in fair value of warrant liabilities	64,501	(26,073)	15,096	-	-	-	=	-	-	-
Loss on early extinguishment of debt	15,240	-	-	-	-	-	-	-	-	-
Non-cash lease expense	6,279	3,697	1,232	-	-	-	-	-	-	-
Other	(59)	(932)	699					-	-	-
		(13,908		(66,769				(45,346		
Change in net working capital	(43,861))	(917))	(2,849)	18,480	5,793)	(7,668)	(1,937)
Accounts receivable	(4,725)	(19,844)	(4,001)	(14,849)	(12,607)		(3,862)	(9,970)	(10,110)	(11,020)
Deferred contract costs	(3,152)	(1,487)	(1,344)	994	(481)	(1,415)	(669)	(1,571)	(1,752)	(1,910)
Other current assets	(12,273)	9,792	4,046	(5,879)	6,225	(479)	(2,844)	(2,977)	(3,181)	(3,467)
Deferred contract costs, non-current	(7,728)	1,956	(2,141)	2,015	(577)	(3,241)	(858)	(2,661)	(2,247)	(2,449)
Other assets	(7,838)	(14,501)	(3,649)	(13,748)	. ,	2,655	7,193	(3,974)	(4,245)	(4,627)
Operating lease assets	6,354	3,448	1,186	(25,979)	, ,	2,421	(1,845)	(26,904)		(5,265)
Income taxes	3,833	(10,018)	4,984	(23,373)	(1,500)	2, 12 1	(1,015)	(20,301)	(1,030)	(3,203)
Accounts Payable	(1,052)	15,516	(11,270)	8,471	705	(1,395)	858	8,639	2,247	17,278
Accounts rayable Accrued expenses	8,347	4,592	1,041	(21,888)		2,122	5,718	(10,318)	5,504	6,000
Operating lease liabilities			(2,145)			,	429			
	(8,398)	(7,241)		7,864	417	(3,016)		5,694	1,123	1,224
Deferred revenues	4,513	4,196	8,321	(4,120)	1,122	(796)	1,416	(2,378)	3,707	4,041
Extinguishment of interest rate swap liability	(9,987)	(2.17)	-	-	-	-	-	1.075		- (1 7 41)
Other liabilities	(11,755)	(317)	4,055	348	192	277	257	1,075	6,116	(1,741)
Net cash provided by (used in) operating activities	127,335	199,907	250,034	36,005	/1,4/6	103,623	100,029	311,133	355,5/3	386,169
Cash Flows From Investing Activities										
Purchases of software, equipment, and property	(38,321)	(47,951)	(55,032)	(13,525)	(13,909)	(16,874)	(17,474)	(61,782)	(67,173)	(73,037)
(Purchase)/Sale of equity method investments	(10,228)	3,901	-	-	-	-	-	-	-	-
Acquisition of Safekeep		(32,242)	-					-	-	-
Purchase of intangible asset	(49)	-	-	-	-	-	-	-	-	-
		(76,292		(13,525	(13,909	(16,874	(17,474	(61,782	(67,173	
Net cash provided by (used in) investing activities	(48,598))	(55,032)))))))	(73,037)
Cash Flows From Financing Activities										
Proceeds from issuance of non-controlling interest in subsidiary	-	-	-	-	-	-	=	-	-	-
Deemed distribution to CCCIS option holders	(9,006)	-	-	-	-	-	=	-	-	-
Principal payments on long-term debt	(1,336,153)	-	-	-	-	_	_	-	-	-
Proceeds/(Payments) from issuance of long-term debt,	789,927	(8,000)	(8,000)	(3,043)	(2,000)	(2,000)	(2,000)	(9,043)	(8,000)	(8,000)
Proceeds from borrowings on revolving lines of credit	-	-	-	-	-	-	-	-	-	-
Repayment of borrowings on revolving lines of credit	_	_	_	_	_	_	_	_	_	_
Proceeds from issuance of Series B common stock	1,007	_	_	_	_	_	_	_	_	_
Payment of fees associated with early extinguishment of long-term debt			_							
Proceeds from equity infusion from the business combination	764,695									
Proceeds from exercise of stock options	5,085	27,693	25,381	6,345	5,904	4,201	4,695	21,146	20,060	19,851
	3,063	1 '			5,904	4,201	4,093	21,140	20,000	19,651
Repurchases of common stock	(200 174)	-	(328,453)	-	-	-	-	-	-	-
Dividend to stockholders	(269,174)	- (1.01.0)	(11054)	-	-	-	=-	-	-	-
Proceeds from employee stock purchase plan & other		(1,818)	(11,954)					-	-	-
			(323,026							
Net Cash provided (used in) financing activities	(58,440)	17,875)	3,302	3,904	2,201	2,695	12,103	12,060	11,851
			(128,024							
Net change in cash	20,297	141,490)	25,782	61,471	88,950	85,250	261,454	300,460	324,983
Effect of exchange rate changes	129	(246)	(191)	-	-	=	=	-	-	-
Cash and Cash Equivalents Beginning	162,118	182,544	323,788	195,573	221,355	282,826	371,777	195,573	457,027	757,487
- -										1,082,47
						371,777				

Source: BofA Global Research estimtes, company filings





Price objective basis & risk

CCC Intelligent Solutions (CCCS)

Our \$15 PO is based on an EV/revenue multiple of 9.4x our CY25e revenue estimate. The 9.4x multiple represents an EV/revenue/growth multiple of 1.1x, which is above the less than 10% growth and vertical software peers at 0.4x and 0.5x, respectively. We attribute the premium to CCCS' level of profitability, high visibility revenue stream, less dependence on new customer acquisition for growth and expected post-COVID tailwind. Relative to insuretech, we believe CCC's margin profile, FCF generation and depth of proprietary data support a premium valuation. The same holds true relative to <10% growers where there is a wide range of profitability, competitive forces and differentiation. Within the vertical SaaS group we find a strong correlation between EBITDA margin, FCF and valuation.

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

Analyst Certification

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

US - Enterprise Software Coverage Cluster

•	•			
Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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	UUS	Michael J. Funk



US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Weave	WEAV	WEAV US	Michael J. Funk
	Workday Inc.	WDAY	WDAY US	Brad Sills
	Zeta Global	ZETA	ZETA US	Koji Ikeda, CFA
	ZoomInfo	ZI	ZI US	Koji Ikeda, CFA
NEUTRAL				,
	Autodesk	ADSK	ADSK US	Michael J. Funk
	Bentley Systems	BSY	BSY US	Michael J. Funk
	BigCommerce Holdings, Inc.	BIGC	BIGC US	Koji Ikeda, CFA
	Coveo	YCVO	CVO CN	Koji Ikeda, CFA
	Datadog Inc	DDOG	DDOG US	Koji Ikeda, CFA
	DocuSign	DOCU	DOCU US	Brad Sills
	Freshworks, Inc.	FRSH	FRSH US	Adam Bergere
	HashiCorp	HCP	HCP US	Brad Sills
	Jamf	JAMF	JAMF US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	LSPD	LSPD US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	YLSPD	LSPD CN	Koji Ikeda, CFA
	Oracle Corporation	ORCL	ORCL US	Brad Sills
	Paycom	PAYC	PAYC US	Adam Bergere
	Paylocity	PCTY	PCTY US	Adam Bergere
	Shopify, Inc.	SHOP	SHOP US	Brad Sills
	Snowflake	SNOW	SNOW US	Brad Sills
	Veeva Systems, Inc.	VEEV	VEEV US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
UNDERDERFORM	Zooni video communications	ZIVI	ZIVI US	Michael J. Fulik
UNDERPERFORM	AvidXchange, Inc.	AVDX	AVDX US	Brad Sills
	Blackbaud, Inc.	BLKB	BLKB US	Koji Ikeda, CFA
	BlackLine, Inc.	BL	BL US	Koji Ikeda, CFA
	C3.ai	Al	AI US	Brad Sills
	Confluent	CFLT	CFLT US	Brad Sills
		LAW	LAW US	
	CS Disco, Inc.		DBX US	Koji Ikeda, CFA
	Dropbox	DBX ENFN	ENFN US	Michael J. Funk
	Enfusion, Inc. Five9			Koji Ikeda, CFA
		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
	Vertex, Inc.	VERX	VERX US	Brad Sills
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 = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
•	Other LT Liabilities	

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

Menethod 3*is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

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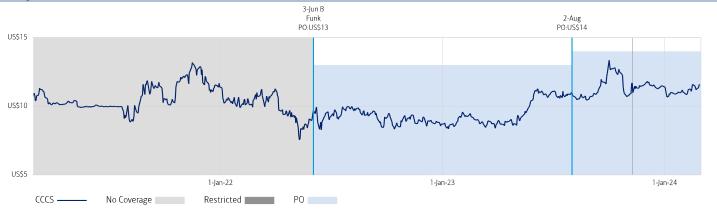
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Disclosures

Important Disclosures

CCC Intelligent Sol (CCCS) Price Chart



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

The Investment Opinion System is contained at the end of the report under the heading 'Fundamental Equity Opinion Key'. Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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%

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

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

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

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

R2Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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