



EQUITY RESEARCH

January 19, 2023

Industry Update

CEO Sentiment On The Decline – Bits & Bytes Weekly

Leaders Gather In Davos As Recession Fears Grow

Our Conclusion

The World Economic Forum kicked off earlier this week in Switzerland, making its return from a COVID-driven three-year hiatus. A record number of business leaders is set to meet in Davos and an uncertain economic backdrop appears to be keeping the level of enthusiasm muted. Recently published surveys from PwC and Accenture have found that CEO sentiment has declined notably in 2023, as the group looks into the year ahead and beyond. Key finding show CEOs preparing to face a number of near-term challenges, with the need to reinvent their businesses a top priority. Top technology investment plans were cited as automation, upskilling workforces and the deployment of advanced tech.

Key Points

"Evolve or die", say 4,410 CEOs in the 2023 PwC CEO <u>survey</u>, recognizing the potential for disruption ahead. 40% of CEOs think their company will not be economically viable a decade from now if it continues on its current course. This pattern held consistent across a range of sectors, including telecommunications (46%), manufacturing (43%), healthcare (42%) and technology (41%). Across geographies, CEOs in Japan and China were the most concerned about the long-term viability of their business models, while CEOs in the United States were the most optimistic.

When asked about investing time and money for the future, technology investments emerged as a top priority, with ~75% of companies focused on automation, upskilling, and deployment of advanced technologies such as AI. Of those investments, ~60% are focused on reinventing the business for the future, while ~40% are to preserve the current business. That 60/40 ratio was fairly consistent across all investment priorities as companies aim to strike a balance between long-term success and short-term preservation. Similarly, Accenture's recent survey of more than 1,500 C-suite executives shows that ~75% of respondents see the pace of technology innovation, climate change and changing consumer behaviour as drivers behind an acceleration in digital transformation investments.

As near-term risks remain elevated given the macro environment, CEOs surveyed plan to take actions to cut costs in 2023, without delaying strategic M&A initiatives. Approximately 52% of CEOs reported that their organization has begun cutting costs, with only ~19% implementing hiring freezes, and ~16% reducing the size of their workforce. In contrast, a PwC survey from Oct/Nov 2008 at the height of the GFC found about twice as many CEOs were anticipating near-term headcount reductions.

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Sector:

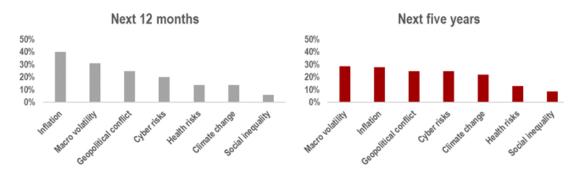
Information Technology

CEO Pessimism About Global Economic Growth

Roughly 75% of CEOs surveyed as part of PwC's Annual Global CEO Survey expect global economic growth to decline over the next 12 months. These expectations held across all major economies, but show a stark reversal from last year, when ~77% of surveyed execs anticipated improvement in global growth.

The drop-off in CEO confidence levels in their own companies was ~25%, larger than at any other time in the past 15 years, with the exception of the plunge in 2009 (~50%). Expectations and the outlook for near-term revenue are weak, particularly for CEOs in the real estate and private equity industries, which are most impacted by the rising capital costs and tightening liquidity conditions. When asked about near-term challenges facing businesses, CEOs cited inflation, macroeconomic volatility and geopolitical conflict as the top three concerns (see bar charts in Exhibit 1).

Exhibit 1: How exposed will your company be to key threats over a) the next 12 months, and b) the next five years?



Source: PwC 26th Annual Global CEO Survey and CIBC World Markets Inc.



News Impacting Our Coverage

CGI strengthening longstanding partnership with SAP

CGI is strengthening its longstanding global partnership with SAP by adding SAP RISE certification to its portfolio of services in Canada. CGI said the RISE with SAP certification enables the company to accelerate clients' transitions to the cloud. With this new certification, CGI is well positioned to modernize enterprise resource planning solutions for a broader segment of the market and offer enhanced end-to-end capabilities for its clients, the company said. It also said this new qualification helps CGI provide enhanced services to clients who want to accelerate their move to the cloud.

Constellation announces reset of interest rate applicable to unsecured subordinated floating rate debentures

Series 1 of debentures will be reset to 13.3% per annum on March 31, 2023. This new interest rate is equal to the annual average percentage change in the CPI index during the 12-month period ending on December 31, 2022, plus 6.5%, and will be reflected in the June 30, 2023 interest payment on the Debentures. The current interest rate of 9.9% will remain in place until March 30, 2023.

TELUS International to host Investor Day on February 16, 2023

TIXT will be hosting an Investor Day on February 16, 2023. A public webcast of the Investor Day will be streamed live on February 16, 2023, starting at 9 a.m. (ET) and is expected to conclude by 12 p.m. (ET) on the TELUS International Investor Relations website at: https://www.telusinternational.com/investors/news-events



Exhibit 2: CIBC Coverage – Price Returns, 1/19/2022 – 1/19/2023

Software & Systems	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
Constellation Software Inc	2,294.78	1.8	8.2	24.7	17.3	11.0	8.6	2319.28	1783.98
Descartes Systems	71.26	0.7	4.2	10.1	6.6	5.1	2.3	79.08	56.19
Enghouse Systems Limited	39.50	0.7	14.2	37.3	31.1	(12.1)	9.8	46.29	23.96
Open Text Corp	32.31	2.0	12.9	18.7	(18.5)	(30.5)	9.0	48.46	24.91
Kinaxis	146.54	(2.3)	(0.3)	0.3	(3.4)	(4.6)	(3.5)	173.45	119.48
Docebo, Inc.	46.69	1.5	4.2	23.4	30.5	(27.8)	4.4	73.06	31.66
Magnet Forensics	40.33	(2.9)	14.6	66.0	113.4	41.5	8.6	44.11	14.89
Q4 Inc.	2.20	(4.3)	(8.7)	(40.7)	(50.0)	NA	(31.5)	7.51	1.88
Average		(0.4)	6.1	17.5	15.9	(2.5)	1.0		

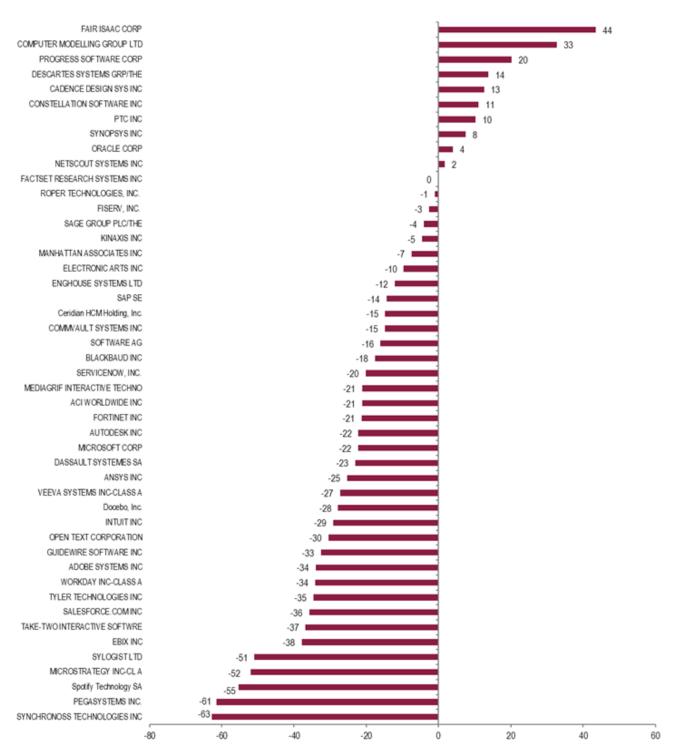
Business Services	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
CGI Group Inc	116.67	0.5	0.4	11.0	8.2	9.9	(0.0)	120.82	95.45
Converge Technologies	5.28	1.1	17.1	(22.7)	(7.4)	(38.9)	15.0	11.59	3.60
Softchoice Corporation	18.35	(2.0)	5.5	(7.3)	(24.6)	(10.7)	0.5	28.66	13.57
Telus International	29.82	1.5	14.3	(16.3)	(14.6)	(16.6)	11.6	40.55	24.11
Average		0.3	9.3	(8.8)	(9.6)	(14.1)	6.8		

Indices	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD
S&P/TSX Composite Index	20,376.23	8.0	6.1	9.1	7.6	(3.9)	5.1
S&P 500 Index	3,928.86	(1.4)	2.9	6.3	(0.2)	(13.3)	2.3
S&P/TSX Software Index	147.31	3.1	7.5	19.8	9.8	(19.4)	8.0
S&P500 Software Index	4,111.33	(1.1)	0.7	2.8	(6.8)	(21.5)	0.4

Source: Factset and CIBC World Markets Inc.



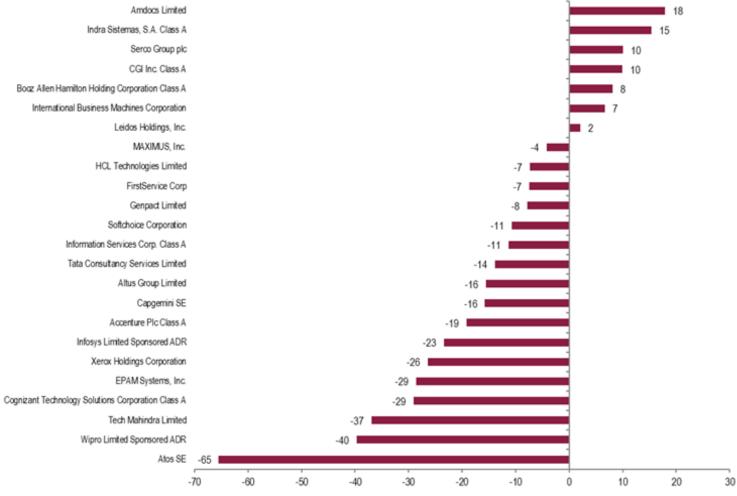
Exhibit 3: Software Stocks - Return Performance (%), 1/19/2022 - 1/19/2023



Source: FactSet and CIBC World Markets Inc.



Exhibit 4: Business Services Stocks - Return Performance (%), 1/19/2022 - 1/19/2023



Source: FactSet and CIBC World Markets Inc.



Exhibit 5: Software Stocks - Comp Table, 2022 - 2024E

	Enterprise		EV/S		E	V/EBITD	Α	P/E		
	Value	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Enterprise Application Software										
Constellation Software Inc.*	37,642	5.8x	5.1x	4.3x	22.9x	19.9x	17.0x	31.0x	29.3x	24.6x
BlackBerry Limited*	2,318	3.4x	2.5x	2.0x	NEG	NEG	>50	NEG	NEG	NEG
Sage Group plc	8,594	4.3x	3.9x	3.6x	18.9x	16.9x	15.3x	28.8x	24.8x	22.0
Tyler Technologies, Inc.	13,732	7.4x	6.9x	6.3x	28.9x	27.5x	23.8x	40.2x	39.4x	33.9
Roper Technologies, Inc.	54,233	10.1x	9.1x	8.6x	24.6x	22.3x	20.6x	31.0x	27.4x	25.5
Enghouse Systems Limited	1,974	4.7x	4.56x	4.49x	14.3x	13.7x	13.55x	19.9x	28.0x	27.63
Oracle Corporation	291,376	6.2x	5.6x	5.2x	12.5x	11.2x	10.0x	17.7x	16.4x	14.4
SAP SE	134,082	4.1x	4.1x	3.8x	16.0x	14.2x	12.3x	23.7x	19.4x	16.8
Enterprise Application Software A	verage	5.7x	5.2x	4.8x	19.7x	18.0x	16.1x	27.5x	26.4x	23.6
Extended ERP										
Adobe Incorporated	154,789	8.7x	8.0x	7.1x	17.8x	16.4x	14.8x	24.7x	22.1x	19.3
Open Text Corporation	11,502	3.2x	3.2x	3.1x	9.5x	8.5x	8.3x	10.7x	9.4x	9.2x
Manhattan Associates, Inc.	7,404	9.8x	9.1x	8.2x	37.6x	34.5x	29.8x	>50	47.2x	40.9
Pegasystems Inc.	3,386	2.7x	2.4x	2.2x	>50	39.3x	18.6x	>50	>50	27.0
Software AG	1,644	1.8x	1.6x	1.5x	8.2x	7.2x	6.1x	17.9x	15.7x	12.7
Fisery, Inc.	86,693	5.2x	4.8x	4.5x	12.0x	11.1x	10.3x	15.9x	14.1x	12.4
Extended ERP Average		5.2x	4.9x	4.4x	17.0x	19.5x	14.7x	17.3x	21.7x	20.2
Software As A Service										
Descartes Systems Group Inc.	5,812	12.0x	10.9x	9.9x	27.0x	24.4x	22.1x	>50	>50	>50
Kinaxis, Inc.*	2,871	7.8x	7.1x	5.9x	38.9x	38.3x	31.3x	>50	>50	>50
Docebo, Inc.*	935	6.5x	4.9x	3.7x	NEG	>50	>50	>50	>50	>50
Lightspeed Commerce Inc*	1,625	2.4x	1.8x	1.4x	NEG	NEG	38.3x	NEG	NEG	>50
Veeva Systems Inc Class A	22,631	10.7x	9.5x	8.2x	27.0x	24.6x	20.7x	38.7x	35.8x	30.7
Shopify, Inc. Class A	38,755	7.0x	5.9x	4.7x	NEG	>50	>50	NEG	>50	>50
Q4 Inc*	30	0.5x	0.5x	0.5x	NEG	NEG	NEG	NEG	NEG	NEG
Magnet Forensics, Inc.*	1,113	11.5x	8.6x	6.6x	>50	37.9x	26.9x	>50	>50	>50
Ceridian HCM Holding, Inc.	11,198	9.1x	7.7x	6.7x	47.7x	37.4x	28.6x	>50	>50	>50
ServiceNow, Inc.	83,145	11.5x	9.4x	7.7x	36.9x	29.6x	23.6x	>50	45.8x	37.0
Workday, Inc. Class A	40,675	6.7x	5.7x	4.8x	26.1x	21.5x	17.4x	46.1x	36.2x	29.0
Software As A Service Average		7.8x	6.5x	5.5x	33.9x	30.5x	26.1x	42.4x	39.3x	32.3
Infrastructure Vendors										
Microsoft Corporation	1,731,482	8.4x	7.7x	6.8x	17.2x	15.7x	13.5x	25.1x	22.8x	19.4
Infrastructure Vendors Average	1,101,102	8.4x	7.7x	6.8x	17.2x	15.7x	13.5x	25.1x	22.8x	19.4
madradia vondoro Average		U. 1X		0.0X	II.EX	10.1 A	10.01	LU. IX	LL.UX	10.4
Software Average		6.6x	5.8x	5.1x	23.4x	22.5x	19.2x	26.5x	27.1x	23.7
*Share Price Converted to USD		0.07	0.0x	0.1X	20.17	LLION	TOLEA		21111	20.17

*Share Price Converted to USD
Source: FactSet and CIBC World Markets Inc.

CIBC

Exhibit 6: Business Services Stocks - Comp Table, 2022 - 2024E

	Enterprise	EV/EBIT	E	V/EBITD	Α		P/E			EV/S	
	/alue (\$mlns.)	C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Business & IT Services											
CGI Inc. Class A	30,795	12.4x	11.9x	11.3x	11.0x	18.7x	17.3x	16.4x	2.4x	2.3x	2.2x
TELUS International (CDA), Inc.	6,731	12.5x	11.1x	9.8x	9.1x	18.7x	15.6x	14.5x	2.7x	2.4x	2.2x
Accenture Plc Class A	178,398	18.6x	15.4x	14.6x	13.5x	25.3x	23.4x	21.2x	2.9x	2.7x	2.5x
Booz Allen Hamilton	14,853	16.7x	15.0x	14.1x	13.0x	21.4x	19.7x	17.6x	1.7x	1.5x	1.4x
CACI International Inc Class A	8,747	11.8x	13.0x	12.1x	11.3x	16.0x	15.2x	13.8x	1.4x	1.3x	1.2x
DXC Technology Co.	10,159	5.0x	4.2x	4.1x	4.1x	8.3x	6.7x	5.8x	0.7x	0.7x	0.7x
Genpact Limited	9,701	15.0x	12.5x	11.2x	10.1x	17.2x	15.6x	14.0x	2.2x	2.1x	1.9x
International Business Machines	174,531	13.0x	11.3x	11.4x	10.9x	15.4x	14.7x	14.0x	2.9x	2.9x	2.8x
Atos SE	3,070	2.9x	3.1x	2.8x	2.6x	NEG	7.9x	4.2x	0.3x	0.3x	0.3x
Capgemini SE	35,391	12.2x	10.0x	9.5x	8.6x	16.0x	15.0x	13.5x	1.6x	1.5x	1.4x
Sopra Steria Group SA	4,377	8.3x	7.2x	6.6x	6.1x	11.1x	10.1x	9.2x	0.9x	0.8x	0.8x
Converge Technology Solutions C	1,306	13.9x	9.7x	7.2x	6.4x	36.3x	28.8x	23.9x	0.5x	0.5x	0.4x
Business & IT Services Average		11.7x	10.4x	9.8x	9.1x	16.8x	14.7x	13.1x	1.8x	1.7x	1.6x
HR Outsourcing		EV/EBIT	E	V/EBITD	A		P/E			EV/S	
Ceridian HCM Holding, Inc.	11,198	>50	47.7x	37.4x	28.6x	>50	>50	>50	9.1x	7.7x	6.7x
Willis Towers Watson	27,968	12.5x	12.1x	11.2x	10.2x	18.8x	16.6x	14.2x	3.2x	3.0x	2.9x
Aon Plc Class A	74,557	19.5x	18.4x	17.1x	16.0x	23.9x	21.4x	19.3x	6.0x	5.6x	5.4x
Automatic Data Processing, Inc.	99,281	25.9x	21.6x	19.4x	17.9x	31.0x	27.4x	24.6x	5.8x	5.4x	5.0x
Paychex, Inc.	41,890	25.3x	19.4x	18.1x	16.7x	29.0x	26.6x	24.8x	8.7x	8.1x	7.7x
HR Outsourcing Average		20.8x	23.8x	20.6x	17.9x	25.7x	23.0x	20.7x	6.5x	6.0x	5.5x
<u> </u>											
Information Services		EV/EBIT	E	V/EBITD	Α		P/E			EV/S	
Broadridge Financial Solutions, Inc.	20,783	17.9x	15.9x	14.8x	14.1x	21.5x	19.9x	18.4x	3.5x	3.3x	3.2x
Dye & Durham Ltd.	2,252	14.2x	14.2x	11.7x	10.0x	0.1x	0.1x	0.1x	4.6x	4.6x	4.0x
Deluxe Corporation	2,292	6.2x	5.6x	5.7x	5.1x	4.8x	4.9x	3.8x	1.0x	1.0x	1.0x
Information Services Average	2,232	12.8x	11.9x	10.7x	9.7x	8.8x	8.3x	7.4x	3.1x	3.0x	2.7x
information dervices Average		12.0X	11.57	10.77	J.1 X	0.0X	0.0X	1. 1 A	U.IX	0.07	2./ X
Financial Services Technology		EV/EBIT	F	V/EBITD	Δ		P/E			EV/S	
Fidelity National Information Services	60,190	9.8x	9.7x	9.2x	8.6x	10.5x	10.6x	9.4x	4.1x	4.0x	3.8x
Fisery, Inc.	86,693	15.6x	12.0x	11.1x	10.3x	15.9x	14.1x	12.4x	5.2x	4.8x	4.5x
Jack Henry & Associates, Inc.	13,311	19.1x	21.0x	19.1x	17.3x	36.5x	34.7x	31.3x	6.6x	6.1x	5.7x
ACI Worldwide, Inc.	3,975	10.8x	10.7x	19.1x	9.5x	19.5x	21.2x	18.8x	2.8x	2.8x	2.7x
Temenos AG	5,369	9.8x	14.9x	13.9x	11.8x	21.8x	20.3x	16.6x	5.6x	5.3x	4.8x
Global Payments Inc.	40,039	11.0x	10.3x	9.6x	8.8x	11.7x	10.5x	9.2x	5.0x	4.7x	4.4x
Financial Services Technology Aver		12.7x	13.1x	12.2x	11.1x	19.3x	18.5x	16.4x	4.9x	4.6x	4.4x
Tillalicial Services Technology Aver	age	12.7 A	10.17	12.21	11.17	13.01	10.01	10.41	4.51	4.01	4.01
Diversified Real Estate Services		EV/EBIT	-	V/EBITD	Δ		P/E			EV/S	
Colliers International Group Inc.	5,178	9.5x	8.2x	7.6x	7.2x	14.3x	13.9x	12.9x	1.1x	1.1x	1.1x
CBRE Group, Inc. Class A	28,185	13.2x	9.8x	10.3x	9.2x	14.9x	15.4x	13.3x	0.9x	0.9x	0.8x
Jones Lang LaSalle Incorporated	10,217	7.0x	7.7x	8.2x	7.4x	10.7x	11.0x	9.5x	0.5x	0.5x	0.5x
Diversified Real Estate Services Ave		9.9x	8.6x	8.7x	7.4x 7.9x	13.3x	13.4x	11.9x	0.3x	0.3x	0.8x
Diversilled Real Estate Services Ave	rage	9.91	0.01	0./X	7.98	13.38	13.48	11.9%	U.OX	U.OX	U.OX
Software Focused IT Solutions/VAR	_	EV/EBIT		V/EBITD	۸		P/E			EV/S**	
						04.6		45.7	0.0		0.2
Softchoice Corporation* USD	888	36.4x	10.9x	9.5x	8.7x	21.6x	16.6x	15.7x	2.8x	2.6x	2.3x
Softcat Pic*	2,353	14.0x	14.0x	12.8x	11.8x	18.9x	17.9x	16.9x	5.9x	5.2x	4.7x
Crayon Group Holding ASA*	9,630	>50	>50	>50	>50	>50	>50	>50	22.3x	19.1x	16.4x
Bytes Technology Group Pic*	914	18.8x	13.7x	12.1x	10.8x	18.7x	17.6x	15.7x	NA 1.7.	NA 1.5.	NA 1.2v
SoftwareONE Holding Ltd.*	1,759	10.7x	6.6x	5.9x	5.2x	15.6x	13.7x	11.7x	1.7x	1.5x	1.3x
Bytes Technology Group Pic* Avera	ge	19.9x	11.3x	10.1x	9.1x	18.7x	16.5x	15.0x	8.2x	7.1x	6.2x
Business Services Average *Share Price Converted to USD		14.0x	13.1x	11.9x	10.8x	17.6x	16.0x	14.3x	3.9x	3.6x	3.3x

^{**}Software Focused IT Solutions/VARs uses EV/GP metric.

Source: FactSet and CIBC World Markets Inc.



Exhibit 7: SaaS Stocks - Comp Table, 2022 - 2024E

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise	EV/S		EV/S	
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21	C22	C23E	C24E
Tier 1 SaaS (Rule of 40 > 60)										
Zoom Video Communications	11%	28%	4%	27%	39%	30%	14,402	5.4x	3.3x	3.2x	3.0x
CrowdStrike Holdings, Inc.	58%	30%	36%	29%	88%	65%	22,452	25.7x	10.4x	7.8x	6.0x
Shopify, Inc.	25%	-4%	21%	-10%	21%	11%	35,802	7.8x	6.5x	5.4x	4.4x
Zscaler, Inc.	60%	23%	34%	21%	82%	55%	15,615	23.2x	12.3x	9.1x	7.1x
Lightspeed Commerce Inc*	72 %	-18%	25 %	-4%	53%	21%	1,568	7.1x	2.3x	1.8x	1.4x
DocuSign, Inc.	25%	18%	8%	18%	42%	26%	11,641	8.0x	4.7x	4.4x	4.0x
Veeva Systems Inc	18%	38%	13%	36%	56%	48%	22,631	15.4x	10.7x	9.5x	8.2x
Atlassian Corp. Plc	34%	26%	22%	21%	59%	43%	37,859	18.1x	12.0x	9.7x	7.7x
Twilio, Inc.	43%	-7%	17%	-3%	36%	14%	5,810	2.0x	1.5x	1.3x	1.1x
ServiceNow, Inc.	25%	27%	21%	30%	53%	50%	83,145	14.1x	11.5x	9.4x	7.7x
HubSpot, Inc.	38%	16%	19%	11%	53%	31%	14,983	11.5x	8.8x	7.3x	5.9x
Tier 1 SaaS (Rule of 40 > 60) Average							12.6x	7.6x	6.3x	5.1x

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise	EV/S		EV/S	
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21	C22	C23E	C24E
Tier 2 SaaS (Rule of 40 b/v	v 40-60)										
Docebo, Inc.*	46%	0%	29%	-4%	46%	25%	937	9.0x	6.5x	4.9x	3.7x
Qualys, Inc.	18%	38%	17%	35%	56%	52%	3,618	8.8x	7.4x	6.4x	5.6x
Descartes Systems	17%	37%	8%	38%	54%	46%	5,812	13.7x	12.0x	10.9x	9.9x
Five9, Inc.	32%	1%	16%	7%	33%	22%	5,405	8.9x	7.0x	6.0x	5.0x
Dropbox, Inc.	9%	34%	6%	34%	43%	39%	8,983	4.2x	3.9x	3.7x	3.4x
Wix.com Ltd.	12%	-1%	8%	4%	10%	12%	4,581	3.6x	3.3x	3.0x	2.7x
Workday, Inc.	21%	21%	17%	21%	42%	38%	40,675	9.5x	6.7x	5.7x	4.8x
VMware, Inc.	4%	25%	5%	30%	30%	35%	63,064	5.4x	4.8x	4.5x	4.1x
Tier 2 SaaS (Rule of 40 b/v	v 40-60) Average							7.9x	6.4x	5.6x	4.9x

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise	EV/S	EV/S		
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21	C22	C23E	C24E
Tier 3 SaaS (Rule of 40 b/v	v 28-40)										
BlackLine, Inc.	23%	9%	18%	4%	32%	22%	3,982	9.4x	7.6x	6.5x	5.5x
MongoDB, Inc.	53%	-1%	26%	3%	51%	28%	13,326	22.6x	10.9x	8.5x	6.7x
LivePerson, Inc.	15%	-30%	4%	-4%	-15%	0%	896	1.9x	1.7x	1.6x	1.5x
Rapid7 Inc.	31%	4%	17%	10%	35%	27%	2,642	4.9x	3.9x	3.3x	2.8x
Paylocity Holding Corp.	36%	17%	28%	16%	53%	44%	10,929	17.2x	11.0x	8.7x	7.3x
Q2 Holdings, Inc.	16%	3%	13%	1%	19%	15%	1,984	4.0x	3.5x	3.1x	2.7x
Akamai Technologies, Inc.	6%	24%	3%	22%	30%	25%	15,587	4.5x	4.3x	4.2x	3.8x
Tier 3 SaaS (Rule of 40 b/v	v 28-40) Average							9.2x	6.1x	5.1x	4.3x

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise	EV/S		EV/S	
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21	C22	C23E	C24E
Tier 4 SaaS (Rule of 40 <	28)										
RingCentral, Inc.	29%	7%	17%	10%	36%	28%	4,666	2.9x	2.3x	2.0x	1.7x
Teradata Corporation	-6%	20%	-1%	24%	14%	23%	3,327	1.7x	1.9x	1.8x	1.7x
Zuora, Inc.	14%	3%	9%	0%	17%	9%	764	2.5x	2.0x	1.8x	1.5x
New Relic, Inc.	19%	3%	15%	2%	22%	17%	3,698	5.5x	4.2x	3.6x	3.1x
Kinaxis, Inc.*	44%	3%	19%	10%	46%	29%	2,871	11.4x	7.8x	7.1x	5.9x
Yext, Inc.	5%	4%	3%	-1%	8%	2%	658	1.9x	1.7x	1.6x	1.5x
Splunk Inc.	31%	9%	17%	18%	40%	35%	16,032	7.2x	4.7x	4.0x	3.4x
Tier 4 SaaS (Rule of 40 <	28) Average							4.7x	3.5x	3.1x	2.7x
SaaS Average								9.1x	6 1x	5.2x	4 4x

^{*}Share Price Converted to USD

Source: Company reports, FactSet and CIBC World Markets Inc.



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