

## EQUITY RESEARCH

February 16, 2023

Industry Update

**Tech Activism Rising – Bits & Bytes Weekly**

When Times Are Tough, Everyone's A Critic

**Our Conclusion**

With the global economy slowing down and tech valuations having come back down to earth, some investors are searching for additional ways to generate returns in the tech sector. In 2022, Bloomberg noted a 74% increase in activist engagement involving tech companies, with 32 tech sector shareholder activism campaigns registered in Q4/22 alone. While H1/22 tech sector activism mainly focused on hardware companies given supply chain challenges, recently the focus has shifted towards software firms. Most notably, multiple activist investors have built positions in CRM giant Salesforce, including a multi-billion dollar stake by Elliott Investment Management. Specific details of the activist campaigns against Salesforce haven't been made public, but the company is facing a number of challenges including the departure of co-CEO Bret Taylor, a 10% reduction in headcount, and macro-related pressure on IT spending that has resulted in the company declining to provide 2024 guidance.

**Key Points**

While software companies may not have been traditional activist targets as the sector outperformed, the 2022 sell-off has put software businesses under more of a microscope. The market's shift from a pursuit of growth at all costs to a preference for profitability is forcing firms to rein in spending and focus closely on operations. Furthermore, as some of the larger tech firms like Salesforce age, many formerly high-growth tech companies are transitioning into a more mature phase of the business life cycle, making them a bigger target for activism. Common area of focus for activist campaigns include operational efficiency, cost cutting, and business structure reorganization (including sales/privatizations, spin-offs, and divestitures).

Even founder-led companies whose owners are protected by dual-class share structures haven't been spared from outside investor pressures. Meta founder/CEO Mark Zuckerberg announced a 13% cut to its workforce after investor Altimeter Capital issued a public letter in October 2022 decrying Meta's bloated operations and its large investments in pursuit of metaverse leadership. Perhaps in an effort to fend off potential activist campaigns, Alphabet, Amazon, and Microsoft have all announced cost-cutting initiatives.

While there may be a negative perception of hostile shareholder activism, a Harvard University study that looked at 2,000 activist interventions from 1994 to 2007 found that the share price of the targets rose by an average of 6% in the short term. Those share price gains were sustained over the long run, with the study finding no evidence of a pump-and-dump pattern that would impact long-term share price performance. Against that backdrop, the current wave of activism may end up being the painful medicine that tech companies need to prompt them to right-size their workforces and focus on operational discipline to deliver another leg of elevated shareholder returns in the future.

*All figures in Canadian dollars unless otherwise stated.*

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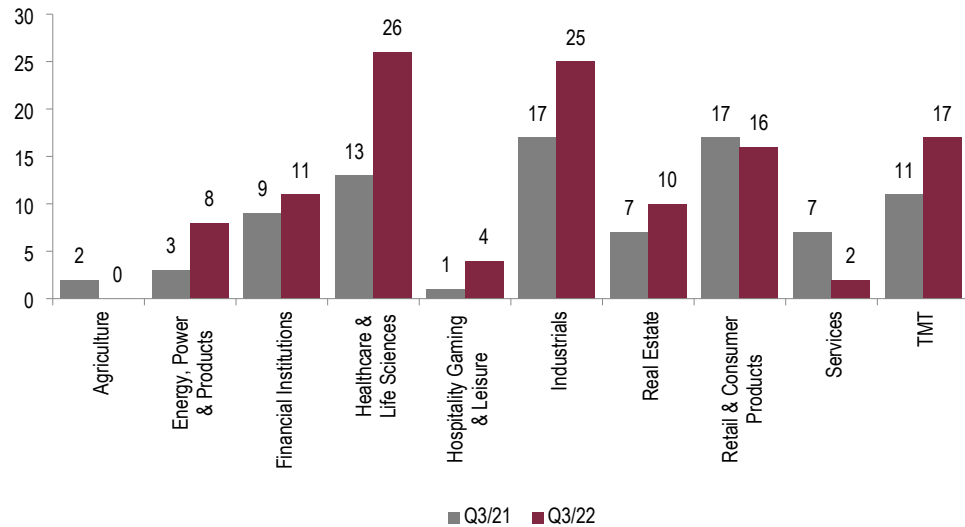
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**Sector:**  
Information Technology

## Activism Vulnerability Index

Work by FTI Consulting highlighted an uptick in activist activities in the TMT sector with 17 active campaigns in Q3/22, up from 11 campaigns from Q3/21. Starboard Value has stakes in three software companies alone, including Salesforce, with its activist campaigns primarily focused on improving margins. No companies are immune to activism, as some studies have suggested that a mere 0.02% stake can cause significant disruption even at mega-cap companies. Through the first nine months of 2022, one-third of all activist campaigns targeted large-cap companies, up notably from 18% in 2020.

**Exhibit 1: Activist Targets By Sector In U.S. And Canada-Based Companies - Q3/21 Vs. Q3/22**



Source: FTI Consulting and CIBC World Markets Inc.

Despite the rise in software shareholder activism in 2022, the sector still only ranks as the 10<sup>th</sup> most vulnerable sector from an activism standpoint. The table in Exhibit 2 outlines the most vulnerable sectors with Telecom, Media & Healthcare topping the list.

**Exhibit 2: FTI Consulting – Activism Vulnerability Score By Sector – Q3/22 Vs. Q2/22**

Rank	Change In Rank Q/Q	FTI Consulting Industry	3Q/22 Activist Vulnerability Score	2Q/22 Activist Vulnerability Score
1	↑ 2	Telecommunications	59.5	57.2
2	↑ 3	Media & Publishing	59	56
3	↑ 1	Healthcare Services	58.8	56.3
4	↓ 3	Aviation & Airlines	58.2	58.6
5	↑ 10	Utilities	57.4	53.1
6	↑ 2	Aerospace and Defense	56.4	55.1
7	↑ 10	Real Estate	56	52.4
8	↓ 6	Savings Banks	56	58.2
9	-	Insurance	55.4	54.7
10	↑ 1	Technology Software	55.2	54.4

Source: FTI Consulting and CIBC World Markets Inc.

## News Impacting Our Coverage

### Research Highlight: CSU - A Closer Look At Constellation's Spin-out Strategy

The typical shareholder view of a successful spin-out is one that unlocks value through a premium multiple on the spun-out business. However, we believe Constellation's spin-out strategy is based on a different premise: allowing it to achieve targeted hurdle rates on larger deals and to incentivize management of the newly spun-out entity. While these two views may sometimes be at odds, Constellation was able to achieve both objectives with its Topicus spin-out. The Topicus spin-out allowed Constellation to win a larger deal and the spin-co has traded at a 5x-7x EV/EBITDA premium to Constellation over the last six months. Constellation is in the midst of another spin-out (Lumine) and we expect Lumine to trade at a slight discount to Topicus given lower organic growth and more sector concentration, but at a premium to Constellation given Lumine's smaller size and longer runway to continue to make accretive, smaller VMS-type software acquisitions. [Link to note](#)

### Research Highlight: CTS - Pre-releases Q4 Results That Are Below Consensus

Converge pre-released Q4 results that were below consensus. The midpoint of net revenue was 3% below consensus and the midpoint of adj. EBITDA 18% below. Adj. EBITDA margin (as a percentage of gross profit) was 25.2% at the midpoint, 340 bps below the Street. Backlog was up \$52MM sequentially to \$556MM, with company noting continued supply chain challenges, specifically around networking gear. The press release did not mention the ongoing strategic review process. We will be looking for commentary around progress of acquisition integration, strategic review process, and additional details on lengthening sales cycle when the company releases full results on March 15, followed by a conference call on March 16. [Link to note](#)

### Research Highlight: DND – Hinging On A Housing Recovery

DND's FQ2 miss illustrates how closely linked the performance of the business is to housing market transaction activity despite increases in subscription revenue and minimum contracted values. We estimate an organic decline in the low teens, which is ahead of the 38% Y/Y decline in Canadian housing market transactions as a result of Geographic and product diversification but has clearly been impacted by slowdowns. Given this relationship, the most important questions when it comes to Dye & Durham are: when and to what extent are housing transactions set to improve? While we are retaining our Outperformer rating on DND, we are reducing our F2024 estimates as we expect the recovery of housing markets to be slower than originally anticipated. Despite this slower recovery, DND is well positioned to benefit from a recovery given its high gross margins, the impact of recent cost savings initiatives, and a strong competitive position and pricing power in its core market. [Link to note](#)

### Research Highlight: DSGX - Acquires GroundCloud For US\$138MM Plus Earn-out

Descartes announced the acquisition of GroundCloud for \$138MM plus up to \$80MM in future earn-outs. GroundCloud is an SaaS provider of final-mile logistics software and will add complementary capabilities to the Descartes platform, including safety and compliance. GroundCloud is a larger acquisition for Descartes, with its purchase price exceeding Descartes full year M&A spend in F23. Despite its size, we view GroundCloud as a relatively typical Descartes acquisition and expect that it was done at a valuation in line with historical (mid-teens EBITDA multiple) and with a typical 5-7 year payback. While financials were not disclosed, the larger-than-typical earn-out suggests that GroundCloud may have been growing in excess of Descartes traditional 5%-10% organic growth. [Link to note](#)

### Research Highlight: AIF - Q4/22 Preview

The early returns on Altus' intelligence-as-a-service platform strategy have been strong over the course of 2022, and continued revenue and bookings growth in the Altus Analytics (AA) business in Q4 would further reinforce that strength. Property tax growth should continue in

the quarter, benefitting from the extended U.K. tax cycle, while we expect valuation and cost advisory to remain a source of low-single-digit growth. Despite the solid momentum in Analytics, we continue to view Altus shares as fairly valued, trading at a consolidated EV/EBITDA multiple of 21x on F23E EBITDA, in line with analytics and information services peers, despite ~50% of the business generated by the CRE consulting businesses and a consolidated EBITDA margin profile over 20% lower than the average of information services and analytics providers. [Link to note](#)

**Exhibit 3: CIBC Coverage – Price Returns, 2/16/2022 – 2/16/2023**

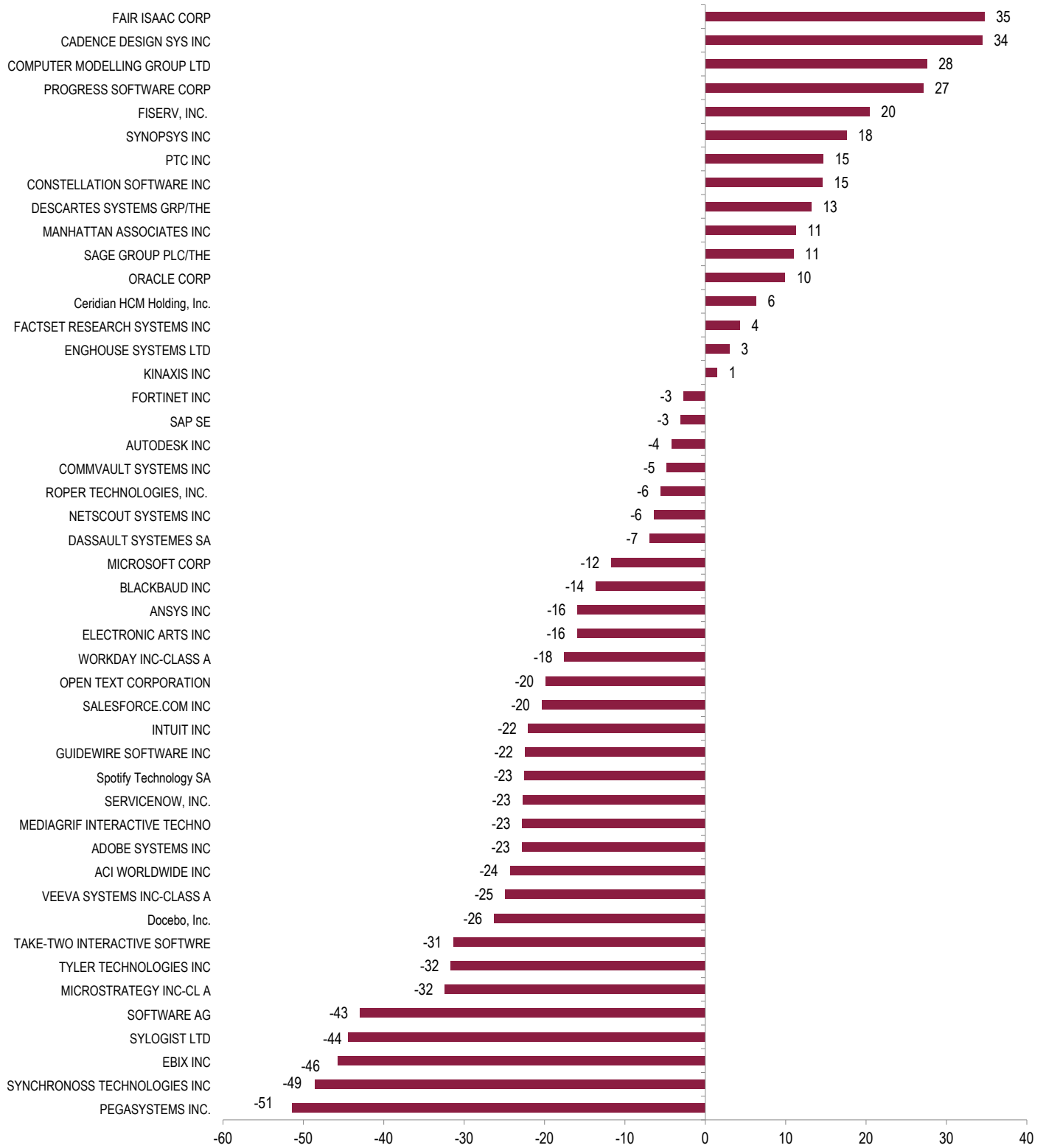
Software & Systems	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
Constellation Software Inc	2,355.11	1.0	5.6	17.2	8.6	14.6	13.4	2417.15	1752.90
Descartes Systems	75.54	3.2	6.1	3.2	3.6	6.5	8.5	79.08	56.19
Enghouse Systems Limited	42.76	3.1	7.2	44.0	29.4	3.0	18.9	43.23	23.96
Open Text Corp	35.42	2.3	8.6	19.8	(11.9)	(19.9)	19.5	44.42	24.91
Kinaxis	162.59	1.0	14.5	4.2	(2.0)	1.5	7.0	173.45	119.48
Docebo, Inc.	52.23	1.1	9.7	24.3	11.6	(26.3)	16.7	71.48	31.66
Magnet Forensics	44.36	(0.1)	7.3	29.2	82.7	65.5	19.4	45.20	14.89
Q4 Inc.	2.65	5.2	14.0	(11.4)	(41.1)	NA	(17.4)	6.20	1.88
<b>Average</b>		<b>2.1</b>	<b>9.1</b>	<b>16.3</b>	<b>10.1</b>	<b>6.4</b>	<b>10.7</b>		

Business Services	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
CGI Group Inc	123.95	0.1	6.5	9.8	10.6	14.9	6.2	125.96	95.45
Converge Technologies	5.00	(15.4)	(4.0)	26.3	(30.6)	(52.4)	8.9	11.04	3.60
Softchoice Corporation	17.76	(0.4)	(3.2)	10.8	(21.6)	(23.1)	(2.7)	28.66	13.57
Telus International	29.04	(0.8)	(2.9)	6.4	(27.3)	(12.5)	8.6	40.55	24.11
<b>Average</b>		<b>(4.1)</b>	<b>(0.9)</b>	<b>13.3</b>	<b>(17.2)</b>	<b>(18.3)</b>	<b>5.3</b>		

Indices	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD
S&P/TSX Composite Index	20,584.42	(0.1)	1.1	3.1	1.6	(3.7)	6.2
S&P 500 Index	4,107.43	0.6	2.7	3.8	(4.6)	(8.2)	7.0
S&P/TSX Software Index	159.30	(2.2)	8.7	15.5	7.4	(7.8)	16.8
S&P500 Software Index	4,568.30	0.2	9.6	9.0	(8.4)	(11.2)	11.5

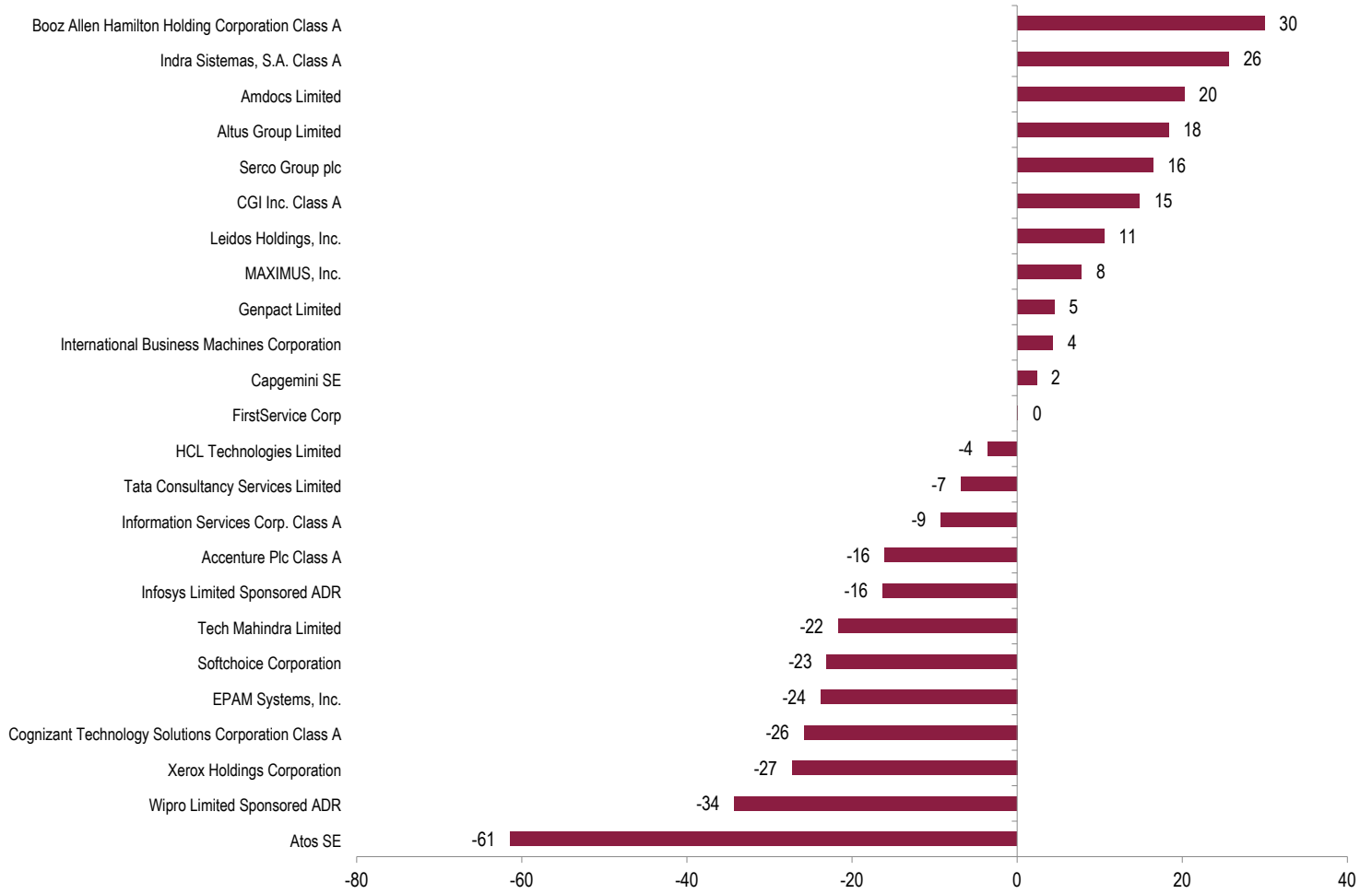
Source: Factset and CIBC World Markets Inc.

**Exhibit 4: Software Stocks – Return Performance (%), 2/16/2022 – 2/16/2023**



Source: FactSet and CIBC World Markets Inc.

**Exhibit 5: Business Services Stocks – Return Performance (%), 2/16/2022 – 2/16/2023**



Source: FactSet and CIBC World Markets Inc.

## Exhibit 6: Software Stocks – Comp Table, 2022 – 2024E

	Enterprise Value (\$mlns.)	EV/S			EV/EBITDA			P/E		
		C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
<b>Enterprise Application Software</b>										
Constellation Software Inc.*	38,556	5.9x	5.2x	4.4x	23.5x	20.3x	17.4x	31.8x	30.1x	25.2x
BlackBerry Limited*	2,369	3.5x	2.5x	2.3x	NEG	NEG	NEG	NEG	NEG	NEG
Sage Group plc	8,551	4.3x	3.9x	3.6x	18.7x	16.6x	15.1x	28.7x	24.7x	22.0x
Tyler Technologies, Inc.	14,202	7.7x	7.1x	6.5x	29.9x	28.4x	24.7x	42.8x	41.6x	35.8x
Roper Technologies, Inc.	50,370	9.4x	8.4x	7.9x	22.9x	20.5x	19.1x	29.4x	25.9x	24.2x
<b>Enghouse Systems Limited</b>	<b>2,154</b>	<b>5.1x</b>	<b>4.98x</b>	<b>4.90x</b>	<b>15.6x</b>	<b>14.9x</b>	<b>14.79x</b>	<b>21.6x</b>	<b>30.3x</b>	<b>29.91x</b>
Oracle Corporation	292,387	6.2x	5.6x	5.2x	12.5x	11.2x	10.0x	17.8x	16.4x	14.3x
SAP SE	139,620	4.2x	4.3x	3.9x	17.5x	15.2x	13.2x	27.0x	20.4x	17.6x
<b>Enterprise Application Software Average</b>		<b>5.8x</b>	<b>5.3x</b>	<b>4.8x</b>	<b>20.1x</b>	<b>18.2x</b>	<b>16.3x</b>	<b>28.4x</b>	<b>27.1x</b>	<b>24.1x</b>
<b>Extended ERP</b>										
Adobe Incorporated	167,362	9.4x	8.6x	7.7x	19.3x	17.8x	16.0x	26.6x	23.9x	20.9x
<b>Open Text Corporation</b>	<b>12,209</b>	<b>3.5x</b>	<b>2.2x</b>	<b>2.0x</b>	<b>9.8x</b>	<b>7.1x</b>	<b>5.2x</b>	<b>11.2x</b>	<b>12.7x</b>	<b>6.6x</b>
Manhattan Associates, Inc.	8,935	11.6x	10.8x	9.6x	40.9x	40.6x	35.8x	>50	>50	46.7x
Pegasystems Inc.	4,292	3.3x	3.1x	2.8x	>50	29.7x	19.8x	>50	41.0x	25.1x
Software AG	1,655	1.7x	1.6x	1.5x	9.6x	8.9x	7.4x	17.6x	12.5x	10.5x
Fiserv, Inc.	94,554	5.6x	5.3x	4.9x	13.0x	12.1x	11.1x	18.0x	15.9x	14.0x
<b>Extended ERP Average</b>		<b>5.9x</b>	<b>5.3x</b>	<b>4.8x</b>	<b>18.5x</b>	<b>19.4x</b>	<b>15.9x</b>	<b>18.3x</b>	<b>21.2x</b>	<b>20.6x</b>
<b>Software As A Service</b>										
Descartes Systems Group Inc.	6,177	12.7x	11.6x	10.5x	28.7x	26.0x	23.5x	>50	>50	>50
Kinaxis, Inc.*	3,201	8.7x	7.9x	6.6x	43.3x	42.7x	34.9x	>50	>50	>50
Docebo, Inc.*	1,071	7.5x	5.6x	4.2x	NEG	>50	>50	>50	>50	>50
Lightspeed Commerce Inc*	1,827	2.7x	2.1x	1.7x	NEG	NEG	46.0x	NEG	>50	>50
Veeva Systems Inc Class A	24,496	11.6x	10.3x	8.8x	29.2x	26.7x	22.4x	41.6x	38.5x	33.0x
<b>Shopify, Inc. Class A</b>	<b>44,661</b>	<b>8.0x</b>	<b>6.7x</b>	<b>5.5x</b>	<b>&gt;50</b>	<b>&gt;50</b>	<b>&gt;50</b>	<b>&gt;50</b>	<b>&gt;50</b>	<b>&gt;50</b>
Q4 Inc*	43	0.8x	0.8x	0.7x	NEG	NEG	NEG	NEG	NEG	NEG
Ceridian HCM Holding, Inc.	12,422	10.0x	8.3x	7.2x	49.6x	33.9x	27.4x	>50	>50	47.8x
ServiceNow, Inc.	90,604	12.5x	10.2x	8.4x	39.6x	32.9x	26.1x	>50	49.6x	40.2x
Workday, Inc. Class A	46,838	7.7x	6.5x	5.6x	30.0x	24.7x	20.0x	>50	41.4x	33.3x
<b>Software As A Service Average</b>		<b>8.6x</b>	<b>7.2x</b>	<b>6.0x</b>	<b>36.8x</b>	<b>32.7x</b>	<b>28.8x</b>	<b>41.6x</b>	<b>43.2x</b>	<b>38.6x</b>
<b>Infrastructure Vendors</b>										
Microsoft Corporation	1,942,157	9.5x	8.8x	7.9x	19.5x	18.0x	15.5x	28.5x	26.3x	22.7x
<b>Infrastructure Vendors Average</b>		<b>9.5x</b>	<b>8.8x</b>	<b>7.9x</b>	<b>19.5x</b>	<b>18.0x</b>	<b>15.5x</b>	<b>28.5x</b>	<b>26.3x</b>	<b>22.7x</b>
<b>Software Average</b>		<b>7.1x</b>	<b>6.2x</b>	<b>5.4x</b>	<b>24.9x</b>	<b>23.3x</b>	<b>20.7x</b>	<b>26.3x</b>	<b>28.2x</b>	<b>26.1x</b>

\*Share Price Converted to USD

Source: FactSet and CIBC World Markets Inc.

## Exhibit 7: Business Services Stocks – Comp Table, 2022 – 2024E

	Enterprise Value (\$mlns.)	EV/EBITDA	EV/EBITDA				P/E			EV/S		
		C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E	
<b>Business &amp; IT Services</b>												
<b>CGI Inc. Class A</b>	<b>32,083</b>	<b>13.0x</b>	<b>13.0x</b>	<b>11.5x</b>	<b>11.1x</b>	<b>19.8x</b>	<b>17.8x</b>	<b>16.9x</b>	<b>2.4x</b>	<b>2.3x</b>	<b>2.2x</b>	
<b>TELUS International (CDA), Inc.</b>	<b>6,552</b>	<b>12.1x</b>	<b>10.8x</b>	<b>9.2x</b>	<b>8.0x</b>	<b>17.4x</b>	<b>17.3x</b>	<b>14.4x</b>	<b>2.7x</b>	<b>2.2x</b>	<b>1.9x</b>	
Accenture Plc Class A	180,044	18.7x	15.6x	14.8x	13.7x	25.6x	23.7x	21.4x	2.9x	2.7x	2.5x	
Booz Allen Hamilton	15,118	17.0x	15.2x	14.3x	13.1x	21.8x	20.1x	18.0x	1.7x	1.6x	1.4x	
CACI International Inc Class A	9,038	12.2x	13.5x	12.5x	11.7x	16.7x	15.7x	14.2x	1.4x	1.3x	1.3x	
DXC Technology Co.	10,106	5.0x	4.2x	4.3x	4.4x	8.3x	7.5x	6.6x	0.7x	0.7x	0.7x	
Genpact Limited	9,600	14.9x	12.2x	11.1x	10.1x	17.1x	15.8x	14.1x	2.2x	2.1x	1.9x	
International Business Machines	167,057	12.4x	10.8x	11.1x	10.7x	14.8x	14.2x	13.4x	2.8x	2.7x	2.6x	
Atos SE	3,191	3.0x	3.2x	2.9x	2.7x	14.4x	6.7x	4.1x	0.3x	0.3x	0.3x	
Capgemini SE	37,848	13.1x	10.7x	10.2x	9.4x	17.4x	16.4x	14.9x	1.7x	1.6x	1.5x	
Sopra Steria Group SA	4,599	8.7x	7.6x	6.9x	6.4x	11.9x	10.8x	9.7x	0.9x	0.9x	0.8x	
<b>Converge Technology Solutions Corp</b>	<b>1,247</b>	<b>13.3x</b>	<b>9.0x</b>	<b>6.7x</b>	<b>6.0x</b>	<b>31.4x</b>	<b>25.0x</b>	<b>21.1x</b>	<b>0.5x</b>	<b>0.4x</b>	<b>0.4x</b>	
<b>Business &amp; IT Services Average</b>		<b>11.8x</b>	<b>10.6x</b>	<b>9.9x</b>	<b>9.2x</b>	<b>16.8x</b>	<b>15.1x</b>	<b>13.4x</b>	<b>1.8x</b>	<b>1.7x</b>	<b>1.6x</b>	
<b>HR Outsourcing</b>												
		EV/EBITDA	EV/EBITDA				P/E			EV/S		
		C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E	
Ceridian HCM Holding, Inc.	12,422	>50	49.6x	33.9x	27.4x	>50	>50	47.8x	10.0x	8.3x	7.2x	
Willis Towers Watson	30,151	13.5x	12.7x	12.4x	11.1x	17.9x	16.4x	13.9x	3.4x	3.3x	3.1x	
Aon Plc Class A	74,494	19.5x	18.7x	17.3x	16.2x	23.2x	21.2x	19.0x	6.0x	5.6x	5.4x	
Automatic Data Processing, Inc.	95,888	25.0x	20.8x	18.7x	17.1x	30.0x	26.7x	24.0x	5.6x	5.2x	4.9x	
Paychex, Inc.	40,729	24.6x	18.8x	17.6x	16.2x	28.2x	25.9x	24.1x	8.4x	7.9x	7.5x	
<b>HR Outsourcing Average</b>		<b>20.7x</b>	<b>24.1x</b>	<b>19.9x</b>	<b>17.6x</b>	<b>24.8x</b>	<b>22.6x</b>	<b>25.8x</b>	<b>6.7x</b>	<b>6.1x</b>	<b>5.6x</b>	
<b>Information Services</b>												
		EV/EBITDA	EV/EBITDA				P/E			EV/S		
		C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E	
Broadridge Financial Solutions, Inc.	20,655	17.8x	15.7x	14.5x	13.8x	21.4x	19.8x	18.1x	3.5x	3.3x	3.1x	
<b>Dye &amp; Durham Ltd.</b>	<b>2,544</b>	<b>16.0x</b>	<b>16.0x</b>	<b>14.5x</b>	<b>11.6x</b>	<b>0.1x</b>	<b>0.1x</b>	<b>0.1x</b>	<b>5.3x</b>	<b>5.3x</b>	<b>5.0x</b>	
Deluxe Corporation	2,481	6.7x	5.9x	6.3x	6.1x	4.7x	6.4x	5.5x	1.1x	1.1x	1.1x	
<b>Information Services Average</b>		<b>11.6x</b>	<b>11.0x</b>	<b>10.3x</b>	<b>9.5x</b>	<b>9.2x</b>	<b>9.3x</b>	<b>8.7x</b>	<b>3.0x</b>	<b>2.9x</b>	<b>2.8x</b>	
<b>Financial Services Technology</b>												
		EV/EBITDA	EV/EBITDA				P/E			EV/S		
		C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E	
Fidelity National Information Services	58,038	9.5x	9.4x	9.5x	8.9x	10.2x	11.3x	10.3x	4.0x	4.0x	3.9x	
Fiserv, Inc.	94,554	17.0x	13.0x	12.1x	11.1x	18.0x	15.9x	14.0x	5.6x	5.3x	4.9x	
Jack Henry & Associates, Inc.	12,279	17.6x	19.5x	18.0x	16.5x	34.0x	32.6x	29.4x	6.1x	5.8x	5.4x	
ACI Worldwide, Inc.	3,999	10.9x	10.8x	10.1x	9.6x	19.6x	21.3x	18.9x	2.9x	2.8x	2.7x	
Temenos AG	6,035	11.0x	16.7x	15.7x	13.4x	24.9x	23.1x	19.4x	6.3x	6.0x	5.4x	
Global Payments Inc.	43,891	12.0x	11.2x	10.4x	9.5x	12.6x	11.4x	9.9x	5.4x	5.1x	4.8x	
<b>Financial Services Technology Average</b>		<b>13.0x</b>	<b>13.4x</b>	<b>12.6x</b>	<b>11.5x</b>	<b>19.9x</b>	<b>19.3x</b>	<b>17.0x</b>	<b>5.1x</b>	<b>4.8x</b>	<b>4.5x</b>	
<b>Diversified Real Estate Services</b>												
		EV/EBITDA	EV/EBITDA				P/E			EV/S		
		C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E	
<b>Colliers International Group Inc.</b>	<b>6,971</b>	<b>12.7x</b>	<b>11.1x</b>	<b>9.6x</b>	<b>9.0x</b>	<b>16.9x</b>	<b>15.6x</b>	<b>14.3x</b>	<b>1.6x</b>	<b>1.5x</b>	<b>1.4x</b>	
CBRE Group, Inc. Class A	29,656	13.9x	10.4x	11.1x	9.7x	16.0x	16.9x	14.4x	1.0x	0.9x	0.9x	
Jones Lang LaSalle Incorporated	10,279	7.0x	8.2x	8.7x	7.7x	11.4x	12.0x	10.1x	0.5x	0.5x	0.5x	
<b>Diversified Real Estate Services Average</b>		<b>14.9x</b>	<b>12.7x</b>	<b>12.2x</b>	<b>8.8x</b>	<b>18.8x</b>	<b>18.4x</b>	<b>12.9x</b>	<b>1.7x</b>	<b>1.6x</b>	<b>0.9x</b>	
<b>Software Focused IT Solutions/VARs</b>												
		EV/EBITDA	EV/EBITDA				P/E			EV/S**		
		C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E	
<b>Softchoice Corporation* USD</b>	<b>862</b>	<b>35.3x</b>	<b>10.6x</b>	<b>9.2x</b>	<b>8.4x</b>	<b>21.1x</b>	<b>16.1x</b>	<b>15.2x</b>	<b>2.7x</b>	<b>2.5x</b>	<b>2.3x</b>	
Softcat Plc*	2,421	14.4x	14.6x	13.6x	12.5x	19.7x	19.1x	17.9x	6.1x	5.5x	4.9x	
Crayon Group Holding ASA*	11,140	>50	>50	>50	>50	>50	>50	>50	25.5x	22.5x	19.5x	
Bytes Technology Group Plc*	916	18.8x	14.3x	12.5x	11.1x	20.1x	19.3x	17.1x	NA	NA	NA	
SoftwareONE Holding Ltd.*	1,852	11.2x	7.0x	6.4x	5.6x	16.5x	14.7x	12.4x	1.8x	1.6x	1.4x	
<b>Bytes Technology Group Plc* Average</b>		<b>19.9x</b>	<b>11.6x</b>	<b>10.4x</b>	<b>9.4x</b>	<b>19.3x</b>	<b>17.3x</b>	<b>15.7x</b>	<b>9.0x</b>	<b>8.0x</b>	<b>7.0x</b>	
<b>Business Services Average</b>		<b>14.4x</b>	<b>13.5x</b>	<b>12.2x</b>	<b>10.9x</b>	<b>18.0x</b>	<b>16.7x</b>	<b>15.6x</b>	<b>4.1x</b>	<b>3.8x</b>	<b>3.5x</b>	

\*Share Price Converted to USD

\*\*Software Focused IT Solutions/VARs uses EV/GP metric.

Source: FactSet and CIBC World Markets Inc.



**Exhibit 8: SaaS Stocks – Comp Table, 2022 – 2024E**

	LTM Revenue Growth	LTM FCF Margin	NTM Revenue Growth	NTM FCF Margin	LTM Rule Of 40	NTM Rule Of 40	Enterprise Value (\$MM)	EV/S		EV/S	
								C21	C22	C23E	C24E
<b>Tier 1 SaaS (Rule of 40 &gt; 60)</b>											
Zoom Video Communications	11%	28%	4%	27%	39%	31%	18,287	6.9x	4.2x	4.0x	3.8x
CrowdStrike Holdings, Inc.	58%	30%	36%	29%	88%	65%	27,028	30.9x	12.5x	9.3x	7.2x
<b>Shopify, Inc.</b>	25%	<b>-4%</b>	<b>20%</b>	-9%	<b>21%</b>	10%	<b>54,132</b>	<b>11.7x</b>	<b>9.7x</b>	<b>8.1x</b>	<b>6.6x</b>
Zscaler, Inc.	60%	23%	34%	22%	82%	56%	19,904	29.6x	15.6x	11.6x	9.1x
<b>Lightspeed Commerce Inc*</b>	<b>72%</b>	<b>-18%</b>	<b>24%</b>	<b>-4%</b>	<b>53%</b>	<b>20%</b>	<b>1,821</b>	<b>8.2x</b>	<b>2.7x</b>	<b>2.1x</b>	<b>1.7x</b>
DocuSign, Inc.	25%	18%	8%	18%	42%	26%	13,247	9.1x	5.4x	5.0x	4.6x
Veeva Systems Inc	18%	38%	12%	36%	56%	48%	24,943	17.0x	11.8x	10.4x	9.0x
Atlassian Corp. Plc	34%	26%	22%	21%	59%	43%	48,074	23.0x	15.2x	12.3x	9.9x
Twilio, Inc.	43%	-7%	17%	-3%	36%	14%	9,248	3.3x	2.4x	2.1x	1.8x
ServiceNow, Inc.	23%	30%	22%	30%	53%	53%	92,121	15.6x	12.7x	10.4x	8.5x
HubSpot, Inc.	38%	16%	19%	12%	53%	31%	17,365	13.4x	10.2x	8.5x	6.9x
<b>Tier 1 SaaS (Rule of 40 &gt; 60) Average</b>								<b>15.3x</b>	<b>9.3x</b>	<b>7.6x</b>	<b>6.3x</b>
<b>Tier 2 SaaS (Rule of 40 b/w 40-60)</b>											
<b>Docebo, Inc.*</b>	<b>46%</b>	<b>0%</b>	<b>29%</b>	<b>-4%</b>	<b>46%</b>	<b>25%</b>	<b>1,096</b>	<b>10.5x</b>	<b>7.6x</b>	<b>5.7x</b>	<b>4.3x</b>
Qualys, Inc.	18%	38%	17%	35%	56%	52%	4,252	10.3x	8.7x	7.7x	6.7x
<b>Descartes Systems</b>	<b>17%</b>	<b>37%</b>	<b>9%</b>	<b>38%</b>	<b>54%</b>	<b>47%</b>	<b>6,375</b>	<b>15.0x</b>	<b>13.1x</b>	<b>11.9x</b>	<b>10.8x</b>
Five9, Inc.	32%	1%	16%	7%	33%	22%	6,254	10.3x	8.1x	6.9x	5.8x
Dropbox, Inc.	9%	34%	5%	34%	43%	39%	9,418	4.4x	4.1x	3.9x	3.6x
Wix.com Ltd.	12%	-1%	8%	8%	10%	17%	5,058	4.0x	3.7x	3.4x	3.0x
Workday, Inc.	21%	21%	17%	21%	42%	38%	47,521	11.1x	7.8x	6.6x	5.6x
VMware, Inc.	4%	25%	5%	30%	30%	35%	60,252	5.1x	4.5x	4.3x	4.0x
<b>Tier 2 SaaS (Rule of 40 b/w 40-60) Average</b>								<b>8.8x</b>	<b>7.2x</b>	<b>6.3x</b>	<b>5.5x</b>
<b>Tier 3 SaaS (Rule of 40 b/w 28-40)</b>											
BlackLine, Inc.	23%	9%	18%	4%	32%	22%	4,750	11.2x	9.1x	8.0x	6.9x
MongoDB, Inc.	53%	-1%	26%	3%	51%	29%	15,591	26.4x	12.7x	10.0x	7.9x
LivePerson, Inc.	15%	-30%	3%	-4%	-15%	-1%	1,196	2.5x	2.3x	2.2x	2.0x
Rapid7 Inc.	31%	4%	17%	10%	35%	27%	3,607	6.7x	5.3x	4.7x	4.0x
Paylocity Holding Corp.	36%	17%	28%	16%	53%	44%	12,099	19.0x	12.0x	9.4x	7.8x
Q2 Holdings, Inc.	16%	3%	13%	1%	19%	14%	2,222	4.5x	3.9x	3.4x	3.0x
Akamai Technologies, Inc.	6%	24%	2%	22%	30%	25%	14,437	4.2x	4.0x	3.9x	3.6x
<b>Tier 3 SaaS (Rule of 40 b/w 28-40) Average</b>								<b>10.6x</b>	<b>7.0x</b>	<b>5.9x</b>	<b>5.0x</b>
<b>Tier 4 SaaS (Rule of 40 &lt;28)</b>											
RingCentral, Inc.	29%	7%	17%	10%	36%	27%	6,030	3.8x	3.0x	2.7x	2.4x
Teradata Corporation	-6%	20%	-1%	23%	14%	22%	4,386	2.3x	2.4x	2.4x	2.3x
Zuora, Inc.	14%	3%	9%	0%	17%	9%	1,071	3.5x	2.8x	2.5x	2.1x
New Relic, Inc.	19%	3%	15%	2%	22%	17%	5,088	7.6x	5.7x	4.9x	4.3x
<b>Kinaxis, Inc.*</b>	<b>44%</b>	<b>3%</b>	<b>19%</b>	<b>10%</b>	<b>46%</b>	<b>29%</b>	<b>3,270</b>	<b>13.0x</b>	<b>8.8x</b>	<b>8.0x</b>	<b>6.7x</b>
Yext, Inc.	5%	4%	3%	-1%	8%	2%	783	2.2x	2.0x	1.9x	1.7x
Splunk Inc.	31%	9%	17%	18%	40%	35%	19,637	8.8x	5.8x	4.9x	4.2x
<b>Tier 4 SaaS (Rule of 40 &lt;28) Average</b>								<b>5.9x</b>	<b>4.4x</b>	<b>3.9x</b>	<b>3.4x</b>
<b>SaaS Average</b>								<b>10.8x</b>	<b>7.3x</b>	<b>6.2x</b>	<b>5.2x</b>

\*Share Price Converted to USD

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

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