

EQUITY RESEARCH

March 8, 2023

Industry Update

IRS Calling

Delayed IPOs Could Lead To Hefty Tax Bills

Our Conclusion

Late-stage private companies have been using restricted stock units (RSUs) to attract and retain top talent for years. These RSUs are triggered by a liquidity event (typically an IPO) and expire within five to ten years. Amid an IPO window that remains effectively closed, many private firms are now debating how to approach expiring RSUs. Letting the RSUs expire worthless impacts employee morale, while modifying the expiration date can lead to tax implications. Stripe has been the most visible company to struggle with RSU expiration and is looking to raise capital to fund a hefty tax bill that will come due as it makes adjustments to its RSU program. With a muted IPO market, 2023 is shaping up to be a year of RSU headaches for many private firms.

Key Points

RSUs are often used by start-ups to attract top talent while avoiding upfront P&L expenses. However, with the IPO window effectively closed, many privates are now approaching an RSU expiration period without a liquidity event on the horizon. One option is to modify the RSU grant; however, the IRS considers the modification of an RSU expiration date to be a deemed event, which triggers taxes for employees. In Stripe's case, the tax bill is expected to come with a hefty US\$3.5B price tag. According to a leaked pitch deck, Stripe is looking to raise this capital through a Series I funding round that values the company at ~\$50B to \$55B, down ~45% from its peak in March 2021. News reports suggest the company could need multiple rounds of funding to raise enough capital to cover the tax bills.

Stripe plans to use its latest round of fundraising to cover the tax bill that early employees will soon face and will reportedly organize a tender offer to allow the impacted staff to sell at least some of their shares. While Stripe is in a relatively solid position to attract new capital, many other companies are not as lucky and are likely unable or unwilling to attract funding to modify their RSUs, leaving them with two options: 1) go public before the RSUs expire or 2) let the RSUs expire worthless.

Stripe has been using RSUs as part of its employees' total compensation since 2017 and is one of the first to encounter the RSU expiration issue. Cloud-based company Foursquare is in a similar position, recently concluding it will let the RSUs expire. We expect this approach will impact employee retention and morale and could make it harder for the company to attract new talent in the future. We see the RSU-expiration issue becoming increasingly common if the IPO market does not open back up.

Stephanie Price, CFA
+1 416-594-7047
Stephanie.Price@cibc.com

Scott Fletcher, CPA, CA
+1 416-956-3229
Scott.Fletcher@cibc.com

Javeria Gaya, CPA
+1 416-594-7261
Javeria.Gaya@cibc.com

Sector:
Information Technology

Stock Compensation At Start-ups

As companies grow, different types of equity compensation are typically used: restricted stock, ISOs, NSOs and RSU. As a start-up grows, it typically moves from granting restricted stock (actual company shares that vest as certain requirements are met) to stock options that give employees the choice of buying company shares at a set price; and potentially to restricted stock units that convert into actual company shares upon vesting.

Exhibit 1: Different Types Of Stock Compensation

	Restricted Stock	ISOs or NSOs	RSUs
When to Issue	Before outside capital	After outside capital	Stable valuation
Tax at Grant	= Value price† - Grant price × Ordinary income rate	None	None
Tax at receipt**	None	= Value price† - Grant price × Applicable tax rate	= - Settlement date price × Ordinary income rate
Tax at sale***	= Sale price - Exercise date price × Capital gains rate	= Sale price - Exercise date price × Capital gains rate	= Sale price - Settlement date price × Capital gains rate
*Assumes recipient files an 83(b) election		***Assumes held for more than one year	
**AMT for ISOs; ordinary incomes for NSOs		† "Value" means fair market value per a 409A audit	

Source: Founderscircle and CIBC World Markets Inc.

News Impacting Our Coverage

Research Highlight: Valuation Monthly

February was a weaker month for software stocks, reversing some of the gains from the January rally. The weaker returns were driven by rising interest rate expectations and persistently stubborn inflation. February was also a busy Q4 earnings month, with company-specific commentary around the demand environment and 2023 outlook driving outsized stock reactions. The S&P 500 Software Index outperformed the TSX by 190 bps in February and ended the month down 0.7%. Our coverage returned -1.3% in February, with all but four companies posting positive returns. Our coverage was impacted by negative returns as investors digested recent earnings (CTS, TIXT) and assessed the read-throughs for those yet to report (SFTC, DCBO). [Link to note](#)

Research Highlight: KXS - Solid Execution; Well Positioned To Continue Growth Trajectory

Despite a weaker macro environment, spending on supply chain software appears robust, with Kinaxis noting increased C-suite demand and decreased sales cycles. We view the 2023 SaaS growth guidance of 25%- 27% as somewhat conservative, with 86% of the mid-point of the guide already in committed backlog. Kinaxis continues to invest in growth, including integrating the recent MPO acquisition, building out a retail offering and working with public cloud providers. [Link to note](#)

Exhibit 2: CIBC Coverage – Price Returns, For The Period Ending Mar 8, 2023

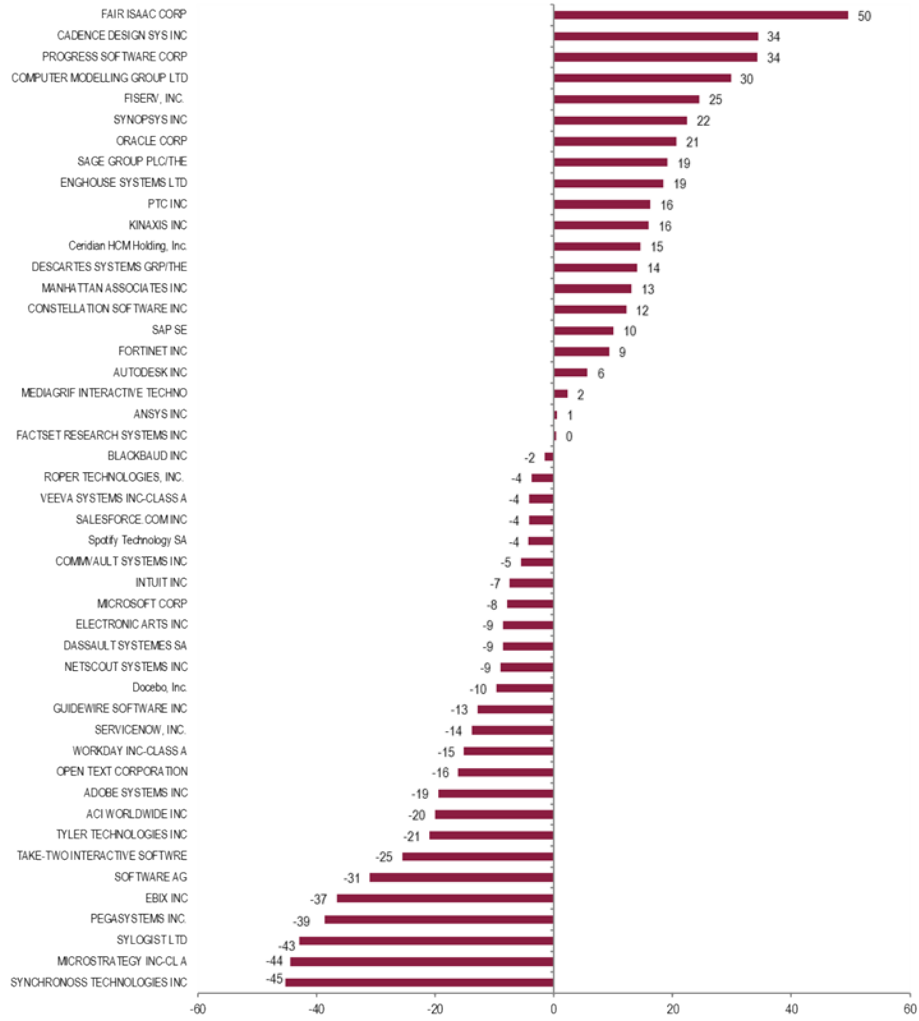
Software & Systems	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52 Week High	52 Week Low
Constellation Software Inc	2,276.33	(0.4)	(1.7)	10.9	19.7	12.8	(1.3)	2417.15	1752.90
Descartes Systems	76.12	3.7	(0.7)	13.2	11.8	6.9	(7.9)	79.08	56.19
Enghouse Systems Limited	43.14	(1.7)	7.3	36.9	36.3	18.2	(10.9)	44.59	23.96
Open Text Corp	34.74	1.5	(0.3)	25.6	17.9	(16.2)	(26.8)	44.10	24.91
Kinaxis	170.00	6.9	4.7	16.1	19.0	15.8	(4.1)	173.45	119.48
Docebo, Inc.	49.25	3.4	(7.6)	15.8	28.0	(9.0)	(42.0)	66.10	31.66
Magnet Forensics R	44.28	0.1	0.9	4.5	80.7	74.5	34.7	45.20	14.89
Q4 Inc.	2.57	7.5	4.9	20.7	(42.1)	NA	(69.8)	5.66	1.88
Software & Systems Average		2.6	0.9	17.9	21.4	14.7	(16.0)		

Business Services	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52 Week High	52 Week Low
CGI Group Inc	124.00	1.2	1.6	6.3	21.8	23.0	10.9	125.96	95.45
Converge Technologies	4.52	0.0	(23.1)	(3.4)	(17.7)	(49.2)	(58.4)	11.04	3.60
Softchoice Corporation	16.14	(2.8)	(8.9)	12.4	(9.4)	(33.3)	(24.4)	28.66	13.57
Telus International	21.88	1.8	(5.1)	12.7	(23.6)	(5.1)	(33.8)	31.52	17.65
Business Services Average		0.0	(8.9)	7.0	(7.2)	(16.2)	(26.4)		

Indices	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD
S&P/TSX Composite Index	20,362.98	0.5	(1.3)	2.0	6.7	(4.1)	(4.1)
S&P 500 Index	3,985.35	0.9	(3.1)	1.3	2.0	(4.4)	(16.4)
S&P/TSX Software Index	155.23	2.7	(5.4)	11.6	24.1	1.7	(26.9)
S&P500 Software Index	4,401.84	2.7	(1.5)	6.4	2.2	(6.4)	(24.7)

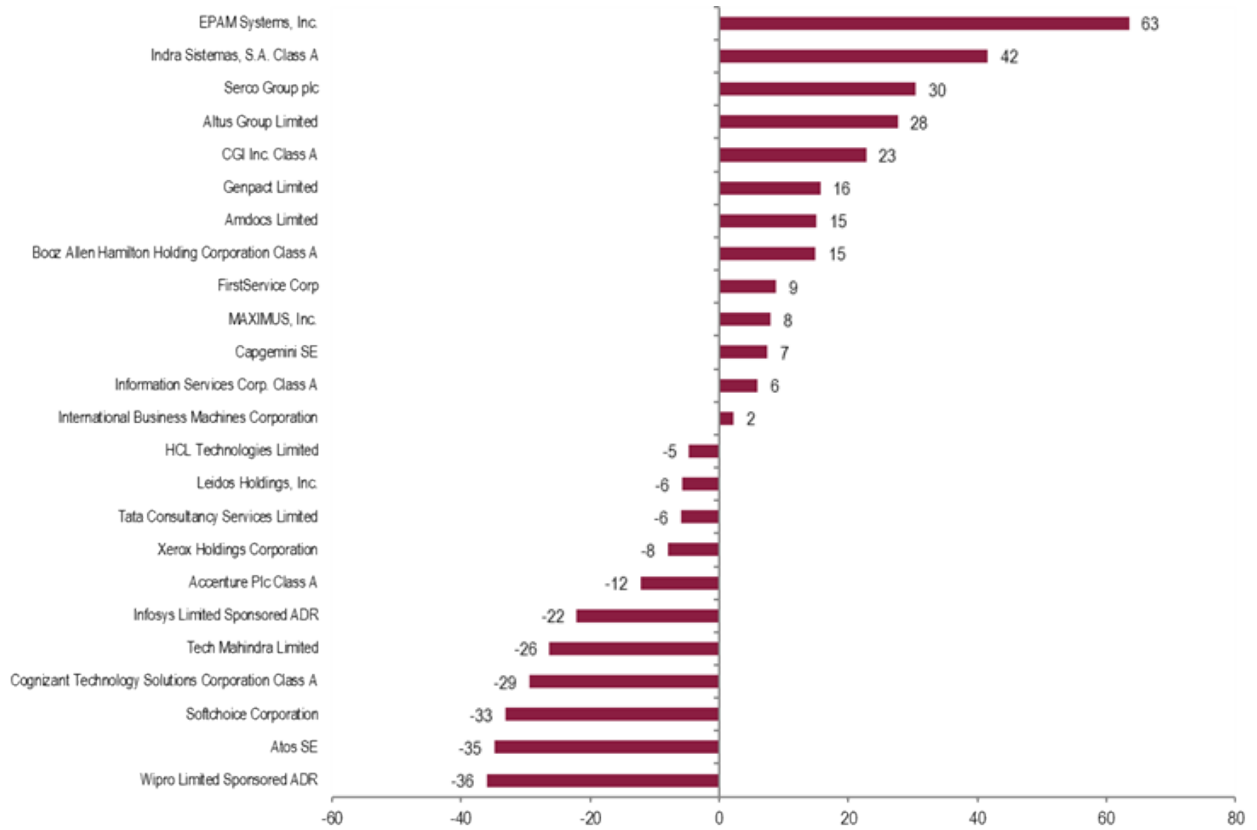
Source: FactSet and CIBC World Markets Inc.

Exhibit 3: Software Stocks – Return Performance (%), 3/8/2022 – 3/8/2023



Source: FactSet and CIBC World Markets Inc.

Exhibit 4: Business Services Stocks – Return Performance (%), 3/8/2022 – 3/8/2023



Source: FactSet and CIBC World Markets Inc.

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

	Enterprise Value	EV/S			EV/EBITDA			P/E		
		C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Enterprise Application Software										
Constellation Software Inc.*	36,309	5.5x	4.9x	4.2x	22.1x	19.2x	16.4x	29.9x	28.3x	23.7x
BlackBerry Limited*	1,923	2.9x	2.1x	2.0x	NEG	NEG	NEG	NEG	NEG	NEG
Sage Group plc	8,513	4.3x	3.9x	3.6x	18.7x	16.6x	15.1x	28.5x	24.5x	21.9x
Tyler Technologies, Inc.	14,203	7.7x	7.3x	6.7x	29.9x	29.6x	26.3x	42.6x	42.2x	37.1x
Roper Technologies, Inc.	50,933	9.5x	8.5x	8.0x	23.2x	20.8x	19.4x	29.6x	26.1x	24.3x
Enghouse Systems Limited	2,182	5.1x	5.04x	4.96x	15.8x	15.1x	14.98x	21.8x	30.6x	30.26x
Oracle Corporation	296,526	6.3x	5.7x	5.3x	12.8x	11.5x	10.3x	18.1x	16.8x	14.6x
SAP SE	140,406	4.2x	4.3x	4.0x	17.6x	15.3x	13.3x	27.1x	20.5x	17.7x
Enterprise Application Software Average		5.7x	5.2x	4.8x	20.0x	18.3x	16.5x	28.2x	27.0x	24.2x
Extended ERP										
Adobe Incorporated	157,590	8.9x	8.1x	7.3x	18.1x	16.8x	15.1x	25.1x	22.5x	19.7x
Open Text Corporation	12,058	3.4x	2.2x	2.0x	9.7x	7.0x	5.2x	11.0x	12.5x	6.5x
Manhattan Associates, Inc.	8,740	11.4x	10.5x	9.4x	40.0x	39.7x	35.0x	>50	>50	45.8x
Pegasystems Inc.	4,299	3.3x	3.1x	2.8x	>50	23.8x	16.7x	>50	31.6x	22.4x
Software AG	1,676	1.7x	1.7x	1.6x	9.8x	9.1x	7.6x	17.8x	12.7x	10.9x
Fiserv, Inc.	94,966	5.7x	5.3x	4.9x	13.1x	12.1x	11.1x	18.1x	16.0x	14.1x
Extended ERP Average		5.7x	5.1x	4.7x	18.1x	18.1x	15.1x	18.0x	19.1x	19.9x
Software As A Service										
Descartes Systems Group Inc.	6,131	12.6x	11.5x	10.4x	28.5x	25.8x	23.3x	>50	>50	>50
Kinaxis, Inc.*	3,287	8.9x	8.1x	6.8x	44.5x	43.9x	35.8x	>50	>50	>50
Docebo, Inc.*	959	6.7x	5.0x	3.8x	NEG	>50	>50	>50	>50	>50
Lightspeed Commerce Inc*	1,404	2.0x	1.6x	1.3x	NEG	NEG	41.1x	NEG	>50	>50
Veeva Systems Inc Class A	24,107	11.3x	10.3x	8.7x	28.5x	28.6x	23.2x	41.2x	40.6x	34.0x
Shopify, Inc. Class A	50,293	9.0x	7.6x	6.2x	>50	>50	>50	>50	>50	>50
Q4 Inc*	47	0.9x	0.8x	0.7x	NEG	NEG	NEG	NEG	NEG	NEG
Ceridian HCM Holding, Inc.	12,106	9.7x	8.1x	7.0x	48.3x	33.0x	26.7x	>50	>50	46.4x
ServiceNow, Inc.	88,363	12.2x	10.0x	8.2x	38.6x	32.1x	25.4x	>50	48.4x	39.2x
Workday, Inc. Class A	45,581	7.4x	6.4x	5.5x	29.0x	22.8x	19.0x	>50	37.7x	30.6x
Software As A Service Average		8.5x	7.1x	6.0x	36.3x	32.5x	28.0x	41.2x	42.2x	37.5x
Infrastructure Vendors										
Microsoft Corporation	1,867,868	9.2x	8.5x	7.6x	18.8x	17.3x	14.9x	27.5x	25.4x	21.9x
Infrastructure Vendors Average		9.2x	8.5x	7.6x	18.8x	17.3x	14.9x	27.5x	25.4x	21.9x
Software Average										
		7.0x	6.1x	5.4x	24.6x	22.9x	20.2x	26.0x	27.3x	25.6x

*Share Price Converted to USD

Source: FactSet and CIBC World Markets Inc.

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

	Enterprise Value (\$mlns.)	EV/EBIT	EV/EBITDA			P/E			EV/S		
		C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Business & IT Services											
CGI Inc. Class A	32,059	13.0x	13.0x	11.5x	11.1x	19.8x	17.7x	16.9x	2.4x	2.3x	2.2x
TELUS International (CDA), Inc.	6,665	12.3x	11.0x	9.4x	8.1x	17.8x	17.7x	14.6x	2.7x	2.2x	2.0x
Accenture Plc Class A	169,414	17.6x	14.7x	13.9x	12.9x	24.1x	22.3x	20.2x	2.7x	2.6x	2.4x
Booz Allen Hamilton	15,039	16.9x	15.2x	14.2x	13.0x	21.6x	20.0x	17.9x	1.7x	1.5x	1.4x
CACI International Inc Class A	9,023	12.2x	13.5x	12.5x	11.7x	16.6x	15.7x	14.2x	1.4x	1.3x	1.3x
DXC Technology Co.	9,509	4.7x	4.0x	4.1x	4.1x	7.6x	6.8x	6.0x	0.6x	0.7x	0.7x
Genpact Limited	9,699	15.0x	12.3x	11.3x	10.2x	17.2x	15.9x	14.2x	2.2x	2.1x	1.9x
International Business Machines	161,325	12.0x	10.4x	10.7x	10.3x	14.1x	13.5x	12.7x	2.7x	2.6x	2.5x
Atos SE	3,491	3.3x	3.4x	3.2x	2.9x	>50	7.9x	5.4x	0.3x	0.3x	0.3x
Capgemini SE	36,424	12.6x	10.4x	9.9x	9.2x	15.5x	15.9x	14.4x	1.7x	1.6x	1.5x
Sopra Steria Group SA	5,280	10.0x	8.9x	7.7x	7.1x	14.4x	11.8x	10.4x	1.0x	1.0x	0.9x
Converge Technology Solutions C	1,142	12.1x	8.2x	6.2x	5.5x	28.3x	22.5x	19.0x	0.5x	0.4x	0.3x
Business & IT Services Average		11.8x	10.6x	9.9x	9.2x	16.9x	15.0x	13.4x	1.8x	1.6x	1.6x
HR Outsourcing											
Ceridian HCM Holding, Inc.	12,106	>50	48.3x	33.0x	26.7x	>50	>50	46.4x	9.7x	8.1x	7.0x
Willis Towers Watson	29,511	13.2x	12.4x	12.1x	10.9x	17.7x	16.4x	13.8x	3.3x	3.2x	3.0x
Aon Plc Class A	72,457	18.9x	18.2x	16.8x	15.7x	22.5x	20.6x	18.5x	5.8x	5.5x	5.2x
Automatic Data Processing, Inc.	94,114	24.5x	20.4x	18.3x	16.8x	29.4x	26.0x	23.4x	5.5x	5.1x	4.8x
Paychex, Inc.	40,058	24.2x	18.5x	17.3x	16.0x	27.7x	25.5x	23.7x	8.3x	7.8x	7.3x
HR Outsourcing Average		20.2x	23.6x	19.5x	17.2x	24.3x	22.1x	25.2x	6.5x	5.9x	5.5x
Information Services											
Broadridge Financial Solutions, Inc.	20,491	17.6x	15.5x	14.3x	13.6x	21.2x	19.6x	17.9x	3.5x	3.3x	3.1x
Dye & Durham Ltd.	2,432	15.3x	15.3x	13.9x	11.1x	0.1x	0.1x	0.1x	5.1x	5.1x	4.8x
Deluxe Corporation	2,127	5.8x	5.1x	5.4x	5.2x	4.3x	5.9x	5.1x	1.0x	1.0x	1.0x
Information Services Corp	410	6.0x	6.3x	6.0x	6.6x	10.7x	10.8x	11.1x	2.1x	2.0x	1.9x
Information Services Average		11.2x	10.6x	9.9x	9.1x	9.1x	9.1x	8.5x	2.9x	2.8x	2.7x
Financial Services Technology											
Fidelity National Information Services	55,359	9.0x	8.9x	9.1x	8.6x	9.4x	10.5x	9.6x	3.8x	3.8x	3.7x
Fiserv, Inc.	94,966	17.1x	13.1x	12.1x	11.1x	18.1x	16.0x	14.1x	5.7x	5.3x	4.9x
Jack Henry & Associates, Inc.	12,090	17.4x	19.2x	17.8x	16.4x	33.4x	32.1x	29.0x	6.1x	5.7x	5.3x
ACI Worldwide, Inc.	3,763	10.2x	10.1x	9.8x	9.0x	20.4x	23.3x	18.8x	2.6x	2.6x	2.5x
Temenos AG	6,134	11.2x	17.0x	16.4x	14.3x	25.5x	24.3x	20.8x	6.5x	6.2x	5.7x
Global Payments Inc.	41,372	11.3x	10.6x	9.8x	9.0x	11.7x	10.6x	9.3x	5.1x	4.8x	4.5x
Financial Services Technology Average		12.7x	13.1x	12.5x	11.4x	19.7x	19.5x	16.9x	5.0x	4.7x	4.4x
Diversified Real Estate Services											
Colliers International Group Inc.	6,590	12.0x	10.5x	9.1x	8.5x	16.1x	14.9x	13.6x	1.5x	1.4x	1.3x
Altus Group Limited	2,839	25.9x	21.0x	19.4x	18.9x	30.6x	28.8x	26.3x	3.8x	3.6x	3.3x
CBRE Group, Inc. Class A	27,876	13.0x	9.5x	10.4x	9.1x	14.6x	16.0x	13.6x	0.9x	0.9x	0.8x
Jones Lang LaSalle Incorporated	10,089	6.9x	8.1x	8.6x	7.6x	10.6x	11.2x	9.5x	0.5x	0.5x	0.4x
Diversified Real Estate Services Average		14.5x	12.3x	11.9x	11.0x	18.0x	17.7x	15.7x	1.7x	1.6x	1.5x
Software Focused IT Solutions/VARs											
Softchoice Corporation* USD	777	31.8x	9.5x	8.4x	7.6x	18.8x	14.5x	13.1x	2.5x	2.2x	2.1x
Softcat Plc*	2,236	13.3x	13.6x	12.7x	11.6x	18.3x	17.8x	16.6x	5.6x	5.0x	4.4x
Crayon Group Holding ASA*	10,089	>50	>50	>50	>50	>50	>50	>50	22.9x	20.5x	17.6x
Bytes Technology Group Plc*	880	18.1x	14.0x	12.2x	10.6x	18.5x	17.7x	15.3x	NA	NA	NA
Bytes Technology Group Plc* Average		21.1x	12.4x	11.1x	9.9x	18.5x	16.6x	15.0x	10.3x	9.3x	8.1x
Business Services Average		14.1x	13.4x	12.2x	11.1x	17.7x	16.5x	15.7x	4.0x	3.7x	3.4x

*Share Price Converted to USD

**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 Growth	LTM FCF Margin	NTM Revenue Growth	NTM FCF Margin	LTM Rule Of 40	NTM Rule Of 40	Enterprise Value (\$MM)	EV/S C21	EV/S C22	EV/S C23E	EV/S C24E
Tier 1 SaaS (Rule of 40 > 60)											
Zoom Video Communications	11%	28%	4%	27%	39%	31%	15,031	5.7x	3.4x	3.4x	3.2x
CrowdStrike Holdings, Inc.	58%	30%	36%	29%	88%	65%	28,061	32.1x	12.9x	9.6x	7.4x
Shopify, Inc.	21%	-3%	19%	-4%	18%	15%	50,548	11.0x	9.0x	7.6x	6.3x
Zscaler, Inc.	60%	23%	34%	22%	82%	56%	16,314	24.2x	12.7x	9.4x	7.3x
Lightspeed Commerce Inc*	49%	-13%	23%	-4%	36%	19%	1,331	6.0x	1.9x	1.6x	1.2x
DocuSign, Inc.	25%	18%	8%	18%	42%	26%	13,133	9.0x	5.3x	4.9x	4.5x
Veeva Systems Inc	18%	38%	12%	36%	56%	48%	24,215	16.5x	11.4x	10.3x	8.7x
Atlassian Corp. Plc	31%	23%	21%	23%	54%	43%	45,274	21.7x	14.3x	11.6x	9.3x
Twilio, Inc.	35%	-6%	12%	4%	29%	16%	10,886	3.8x	2.8x	2.5x	2.2x
ServiceNow, Inc.	23%	30%	22%	30%	53%	52%	88,243	15.0x	12.2x	10.0x	8.2x
HubSpot, Inc.	33%	15%	19%	11%	48%	30%	19,286	14.8x	11.1x	9.4x	7.7x
Tier 1 SaaS (Rule of 40 > 60) Average								14.5x	8.8x	7.3x	6.0x
Tier 2 SaaS (Rule of 40 b/w 40-60)											
Docebo, Inc.*	46%	0%	29%	-4%	46%	25%	963	9.2x	6.7x	5.0x	3.8x
Qualys, Inc.	18%	38%	14%	34%	56%	48%	4,243	10.3x	8.7x	7.6x	6.7x
Descartes Systems	17%	37%	9%	39%	54%	48%	6,143	14.5x	12.7x	11.5x	10.4x
Five9, Inc.	32%	1%	16%	6%	33%	22%	4,906	8.0x	6.3x	5.4x	4.6x
Dropbox, Inc.	8%	37%	7%	34%	44%	40%	8,243	3.8x	3.5x	3.3x	3.2x
Wix.com Ltd.	10%	1%	9%	9%	11%	17%	5,647	4.4x	4.1x	3.7x	3.3x
Workday, Inc.	21%	21%	17%	21%	42%	38%	45,459	10.6x	7.4x	6.4x	5.4x
VMware, Inc.	4%	25%	5%	30%	30%	35%	57,257	4.9x	4.3x	4.0x	3.8x
Tier 2 SaaS (Rule of 40 b/w 40-60) Average								8.2x	6.7x	5.9x	5.1x
Tier 3 SaaS (Rule of 40 b/w 28-40)											
BlackLine, Inc.	23%	10%	13%	8%	33%	21%	4,360	10.2x	8.3x	7.4x	6.4x
MongoDB, Inc.	53%	-1%	26%	3%	51%	29%	14,907	25.2x	12.1x	9.6x	7.6x
LivePerson, Inc.	15%	-30%	3%	-4%	-15%	-1%	869	1.8x	1.7x	1.6x	1.5x
Rapid7 Inc.	28%	8%	13%	2%	36%	15%	3,593	6.7x	5.2x	4.6x	4.0x
Paylocity Holding Corp.	37%	19%	28%	16%	56%	45%	10,366	16.3x	10.3x	8.1x	6.7x
Q2 Holdings, Inc.	16%	3%	16%	3%	19%	19%	2,103	4.2x	3.7x	3.3x	2.9x
Akamai Technologies, Inc.	4%	23%	3%	14%	27%	17%	13,746	4.0x	3.8x	3.7x	3.5x
Tier 3 SaaS (Rule of 40 b/w 28-40) Average								9.8x	6.5x	5.5x	4.6x
Tier 4 SaaS (Rule of 40 <28)											
RingCentral, Inc.	25%	9%	10%	12%	34%	22%	4,802	3.0x	2.4x	2.2x	2.0x
Teradata Corporation	-6%	23%	1%	18%	16%	20%	4,075	2.1x	2.3x	2.2x	2.1x
Zuora, Inc.	14%	3%	9%	0%	17%	9%	1,169	3.8x	3.0x	2.7x	2.4x
New Relic, Inc.	18%	2%	16%	7%	20%	23%	4,806	7.2x	5.4x	4.7x	4.0x
Kinaxis, Inc.*	44%	3%	19%	10%	46%	29%	3,294	13.1x	8.9x	8.1x	6.8x
Yext, Inc.	5%	4%	3%	-1%	8%	2%	908	2.6x	2.2x	2.2x	2.1x
Splunk Inc.	31%	9%	17%	18%	40%	35%	18,622	8.4x	5.2x	4.8x	4.2x
Tier 4 SaaS (Rule of 40 <28) Average								5.7x	4.2x	3.8x	3.4x
SaaS Average								10.1x	6.8x	5.8x	4.9x

*Share Price Converted to USD

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

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