

EQUITY RESEARCH

June 23, 2022

Industry Update

Rules & Regulations – Bits & Bytes Weekly

Big Tech Appears Less Combative In Face Of Regulation

Our Conclusion

European regulators continue to be the most aggressive at regulating global technology firms, offering a preview of what North American and global standards and governance frameworks could potentially look like in a not-so-distant future. Two specific developments in the last week include a number of large social media platforms agreeing to follow a more detailed set of rules around content moderation and Google dropping its appeal of a EUR500MM fine related to copyright violation and committing to ending copyright disputes. Regulatory successes in Europe are likely to be viewed as templates for other countries as tech firms appear less willing to fight back against rules around moderation and copyright.

Key Points

In April, the European Union reached a deal to introduce the Digital Services Act (DSA) with the goal of introducing new rules on digital competition and services. The DSA (noted in a [December Bits & Bytes](#)) is targeted at platforms with over 45 million users in the EU and aims to set procedural standards for dealing with illegal content and ensuring that platforms are consistently and effectively applying their own terms and conditions. The DSA is expected to take effect as early as 2023.

Last week, a number of social media platforms, including Facebook and Twitter, agreed to follow stricter guidelines for moderating content in the EU, rules that are eventually expected to become mandatory under the DSA. The new rules expect the mega platforms to work to prevent advertising to appear next to false or misleading content and to provide users with tools to identify content that should be classified as false or misleading. Interestingly, many of the major platforms were involved in helping draft the legislation, a sign that regulation around misinformation is inevitable and firms would rather have a say in the rules versus fighting the implementation.

In a related development, Google also committed to resolving a copyright dispute in France and dropped its appeal of a EUR500MM fine for failure to negotiate licensing deals in good faith with French publishers and news agencies. French news outlets won an argument that Google's ad sales had siphoned off a potential revenue stream for the news outlets and used their content to generate revenue without paying for it. Google has since signed agreements with more than 150 French publications to help stay onside with copyright law. We note that similar legislation (Bill C-18) [has been proposed in Canada](#) and Google's capitulation in France could be a sign that these rules are likely to become the rule rather than an exception.

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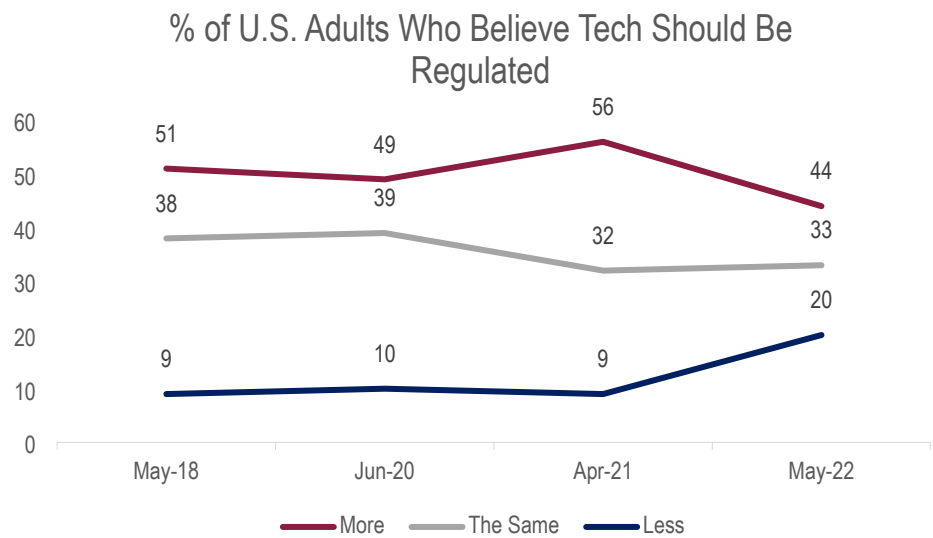
Sector:
Information Technology

All figures in Canadian dollars unless otherwise stated.

For required regulatory disclosures please refer to "Important Disclosures" beginning on page 10.

A Pew Research Center study actually shows that the U.S. public appetite for government regulation of major tech companies has actually declined in 2022. The topic is undeniably politicized as censorship of political views by major platforms has become a big partisan sticking point. As shown in the line chart in Exhibit 1, not only do less American adults support additional regulation, but the percentage of adults who want *less* regulation has more than doubled since 2021. While the public's views on regulation are likely to continue fluctuating with the political climate, it will be interesting to note if politicians continue to pursue big tech regulation if it becomes even less of a priority amongst the broader population.

Exhibit 1: American Views On Regulation – May 2018 – May 2022



Source: Pew Research Center and CIBC World Markets Inc.

News Impacting Our Coverage

Converge Announces Acquisition Of Notarius Through Subsidiary Portage Inc.

Based out of Montreal, Notarius is a leading expert in electronic signatures, digital signatures, and long-term document reliability. Professionals, executives, clients and partners use the products to sign and authenticate millions of electronic documents. The company generated revenue of approximately C\$10.4MM and adjusted EBITDA of C\$2.2MM for FY21.

Enghouse Acquires Competella AB

Enghouse announced that it had acquired Competella AB, a Stockholm-based provider of contact center and attendant console solutions that are available as a SaaS deployment or on-premise. Competella offers a complete contact center platform created to enhance the offerings of Microsoft Teams. Competella's suite is sold through a network of cloud partners and systems integrators. Terms of the acquisition were not disclosed.

Dye & Durham Appoints Two C-Suite Executives

Wojtek Dabrowski has been appointed Chief Communications Officer and John Sulja has been appointed the company's Chief Information Officer. Based out of Toronto, both individuals will report to CEO Matthew Proud. Dabrowski most recently served as the founder and managing partner of Provident Communications Inc., whose full team will join Dye & Durham with Mr. Dabrowski. Mr. Sulja joins from IBM spinout Kyndryl and has served in various IT leadership positions and has extensive experience managing cross-geographical and cross-functional teams.

Carlsberg Selects Kinaxis To Transform Supply Chain

Danish brewer Carlsberg has selected Kinaxis to digitally transform its global supply chain. Carlsberg will use RapidResponse to increase accuracy within demand planning and inventory management across all of its markets. Carlsberg expects RapidResponse's concurrent planning will allow it to remove disparate systems and spreadsheets while gaining insight and reducing risks. Carlsberg will also work with a Kinaxis System Integrator to enhance value by identifying actionable insights.

Research Highlight: WELL – Small Primary Care Acquisition Reflects Strategic Approach

WELL Health announced that it is acquiring INLIV, a primary care clinic in the Greater Calgary region. With WELL spending only ~\$1.85 million on the clinic, the acquisition is relatively immaterial but there are some notable strategic implications to take away from the deal. The acquisition marks WELL's first primary care acquisition in the province of Alberta, and INLIV's executive health capabilities drive 85% of revenue from recurring membership fees. The acquisition follows WELL's \$30 million equity raise on May 11, and is on strategy with stated plans to target primary care acquisitions. With WELL paying 0.25x TTM sales and ~2.5x TTM EBITDA, valuations on primary care clinical assets appear to be quite reasonable, supporting the strategy of focusing on that market in the current environment. [Link to note](#)

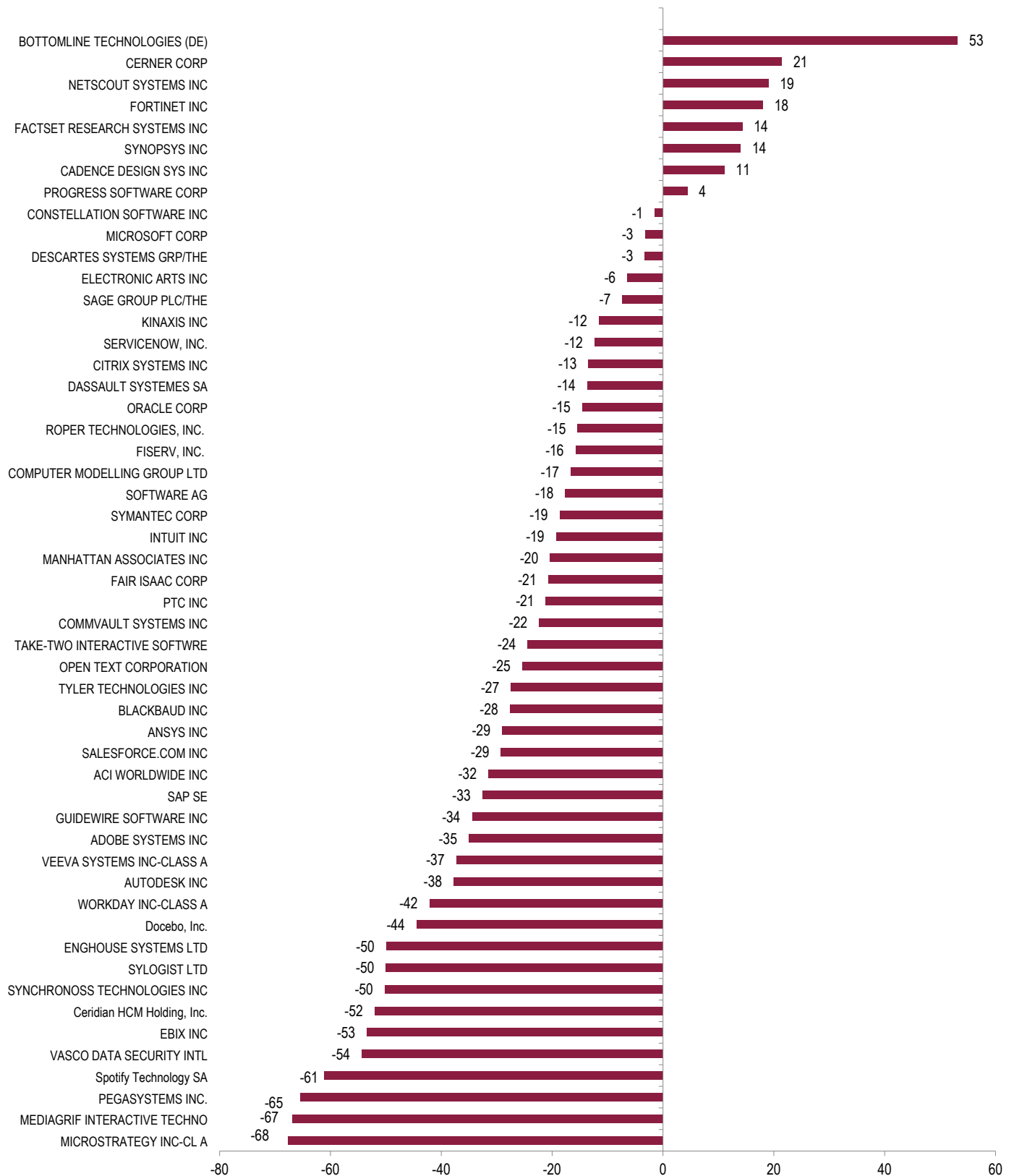
Exhibit 2: CIBC Software/Services – Coverage Performance, 6/23/2021 - 6/23/2022

Software & Systems	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
Constellation Software Inc	1,857.75	2.3	(6.3)	(14.1)	(20.0)	(1.5)	(20.8)	2385.80	1793.93
Descartes Systems	61.79	0.3	0.9	(19.5)	(23.6)	(8.1)	(25.3)	91.39	56.19
Dye & Durham	22.73	1.7	7.1	(23.3)	(48.4)	NA	(49.4)	50.49	12.95
Enghouse Systems Limited	27.41	7.0	(19.2)	(31.2)	(43.0)	(50.0)	(43.4)	64.42	23.96
Open Text Corp	37.60	(1.2)	(4.0)	(11.9)	(20.6)	(25.4)	(20.8)	55.25	35.04
Kinaxis	135.62	4.8	(7.1)	(18.8)	(23.2)	(11.6)	(23.5)	229.98	119.48
Docebo, Inc.	38.58	5.8	(14.6)	(37.9)	(55.8)	(44.5)	(54.5)	117.55	32.35
Magnet Forensics	16.84	0.0	(0.9)	(43.4)	(48.3)	(34.7)	(48.8)	65.80	14.89
Q4 Inc.	4.31	(5.5)	0.0	(16.3)	(48.7)	NA	(49.3)	12.05	4.03
Average		1.7	(4.9)	(24.1)	(36.9)	(25.1)	(37.3)		

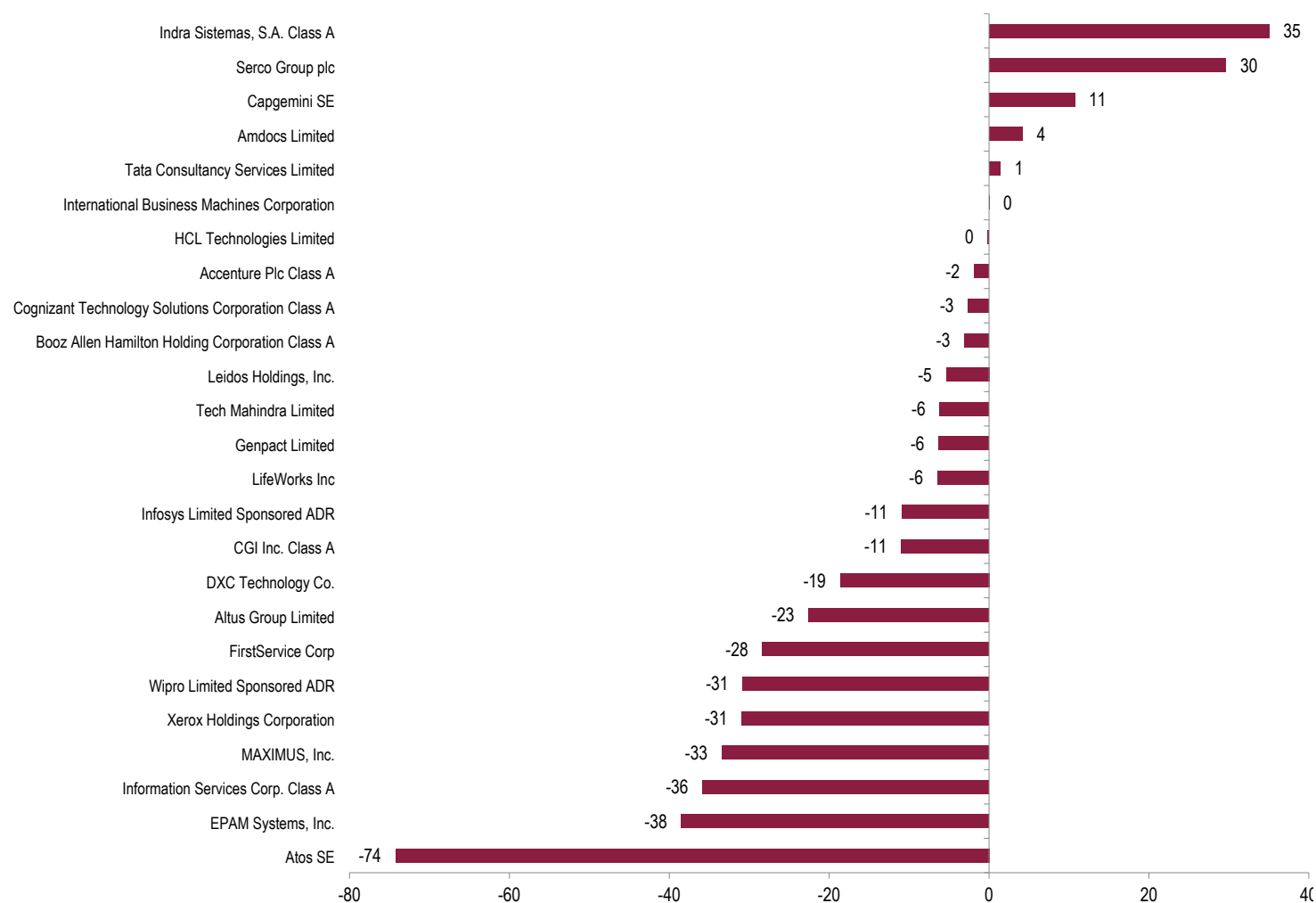
Business Services	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
CGI Group Inc	99.50	3.8	(7.1)	(0.8)	(11.0)	(11.0)	(11.0)	116.88	95.45
Converge Technologies	5.62	(1.7)	(21.8)	(45.2)	(47.8)	(39.4)	(48.3)	13.09	5.40
Softchoice Corporation	20.72	8.1	4.9	(22.7)	(9.9)	(7.4)	(3.0)	45.74	17.91
Telus International	31.17	7.5	(1.3)	(1.6)	(24.8)	(19.0)	(25.4)	49.43	26.75
Average		4.4	(6.3)	(17.6)	(23.4)	(19.2)	(21.9)		

Indices	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD
S&P/TSX Composite Index	18,943.81	(0.3)	(6.2)	(13.6)	(10.7)	(6.1)	(10.7)
S&P 500 Index	3,780.64	3.1	(4.9)	(15.2)	(20.0)	(10.9)	(20.7)
S&P/TSX Software Index	130.61	6.7	(4.7)	(24.1)	(39.2)	(38.8)	(38.5)
S&P500 Software Index	4,329.24	5.0	(1.3)	(14.5)	(25.8)	(10.8)	(26.0)

Source: FactSet and CIBC World Markets Inc.

Exhibit 3: Software Stocks – Return Performance (%), 6/23/2021 - 6/23/2022

Source: FactSet and CIBC World Markets Inc.

Exhibit 4: Business Services Stocks – Return Performance (%), 6/23/2021 - 6/23/2022


Source: FactSet and CIBC World Markets Inc.

Exhibit 5: Software Stocks – Comp Table, 2021 - 2023E (\$MM)

	Enterprise Value	EV/S			EV/EBITDA		
		C21	C22E	C23E	C21	C22E	C23E
Enterprise Application Software							
Constellation Software Inc.*	30,873	6.0x	4.8x	4.2x	20.4x	17.8x	15.0x
BlackBerry Limited*	2,971	3.3x	4.3x	3.1x	>50	NEG	NEG
Sage Group plc	6,661	3.6x	3.4x	3.1x	16.1x	14.2x	12.9x
Tyler Technologies, Inc.	14,372	9.0x	7.7x	7.0x	40.9x	29.8x	27.1x
Roper Technologies, Inc.	48,782	8.4x	8.1x	7.6x	22.0x	20.6x	19.2x
Enghouse Systems Limited	1,314	2.9x	3.0x	3.03x	8.1x	9.1x	8.8x
Oracle Corporation	235,617	5.8x	5.1x	4.7x	12.6x	10.3x	9.7x
SAP SE	112,595	4.0x	3.5x	3.5x	15.7x	12.6x	11.4x
Enterprise Application Software Average		5.4x	5.0x	4.5x	19.4x	16.4x	14.9x
Extended ERP							
Adobe Incorporated	175,087	11.1x	9.8x	8.6x	26.2x	20.0x	17.5x
Open Text Corporation	13,019	3.8x	3.6x	3.5x	10.2x	10.2x	9.5x
Manhattan Associates, Inc.	6,889	10.4x	9.6x	8.6x	48.4x	37.6x	32.5x
Pegasystems Inc.	4,264	3.5x	3.0x	2.5x	NEG	39.3x	23.2x
Software AG	2,004	2.4x	2.2x	2.0x	12.9x	10.5x	8.5x
Fiserv, Inc.	79,592	4.9x	4.8x	4.5x	14.3x	11.2x	10.3x
Extended ERP Average		6.0x	5.5x	4.9x	22.4x	21.5x	16.9x
Software As A Service							
Descartes Systems Group Inc.	5,037	11.9x	10.5x	9.9x	27.2x	24.1x	21.8x
Kinaxis, Inc.*	2,701	10.8x	7.7x	6.8x	>50	42.3x	33.7x
Docebo, Inc.*	769	7.4x	5.3x	3.9x	NEG	NEG	>50
Lightspeed Commerce Inc*	2,598	5.6x	3.7x	2.8x	NEG	NEG	NEG
Veeva Systems Inc Class A	27,880	19.0x	13.0x	11.1x	>50	32.7x	28.0x
Shopify, Inc. Class A	38,287	8.3x	6.6x	5.0x	>50	>50	>50
Q4 Inc*	78	1.4x	1.4x	1.1x	NEG	NEG	NEG
Magnet Forensics, Inc.*	421	6.0x	4.5x	3.5x	22.6x	28.7x	20.4x
Ceridian HCM Holding, Inc.	7,832	7.6x	6.4x	5.5x	>50	39.4x	31.6x
ServiceNow, Inc.	95,596	16.2x	12.9x	10.3x	>50	41.4x	32.9x
Workday, Inc. Class A	33,532	7.8x	5.5x	4.6x	>50	21.8x	17.7x
Software As A Service Average		9.3x	7.0x	5.9x	24.9x	32.9x	26.6x
Infrastructure Vendors							
Citrix Systems, Inc.	15,432	4.8x	4.6x	4.4x	21.9x	14.6x	13.9x
Microsoft Corporation	1,871,513	11.1x	8.8x	7.7x	23.2x	17.4x	15.1x
Infrastructure Vendors Average		8.0x	6.7x	6.1x	22.5x	16.0x	14.5x
Software Average		7.3x	6.1x	5.3x	21.4x	23.0x	19.1x

*Share price converted to USD.

Source: FactSet and CIBC World Markets Inc.

Exhibit 6: Business Services Stocks – Comp Table, 2021 - 2023E (\$MM)

	Enterprise Value	EV/EBITDA			P/E			EV/S		
		C21A	C22E	C23E	C21A	C22E	C23E	C21A	C22E	C23E
Business & IT Services										
CGI Inc. Class A	26,201	10.6x	10.1x	9.6x	17.5x	15.7x	14.6x	2.1x	2.0x	1.9x
Accenture Plc Class A	173,216	18.0x	14.5x	13.3x	30.2x	24.6x	22.0x	3.4x	2.7x	2.5x
TELUS International (CDA), Inc.	7,132	15.3x	11.5x	9.7x	>50	19.4x	16.2x	3.3x	2.8x	2.4x
Booz Allen Hamilton	13,358	15.0x	13.9x	13.1x	19.0x	19.2x	17.5x	1.7x	1.5x	1.4x
CACI International Inc Class A	8,374	11.3x	12.3x	11.5x	14.7x	14.3x	13.2x	1.4x	1.3x	1.2x
DXC Technology Co.	10,451	5.2x	4.1x	4.0x	NEG	7.9x	6.4x	0.6x	0.7x	0.7x
Genpact Limited	9,127	14.2x	11.3x	10.1x	21.9x	15.6x	13.8x	2.3x	2.1x	1.9x
International Business Machines	168,300	12.5x	10.2x	9.9x	21.3x	13.9x	12.8x	2.9x	2.8x	2.7x
Atos SE	3,386	3.2x	3.1x	2.7x	NEG	6.1x	4.1x	0.3x	0.3x	0.3x
Capgemini SE	34,696	12.0x	10.3x	9.4x	25.1x	16.6x	14.6x	1.9x	1.7x	1.6x
Sopra Steria Group SA	3,491	6.6x	5.7x	5.3x	15.9x	10.9x	9.6x	0.7x	0.7x	0.7x
Business & IT Services Average		11.3x	9.7x	9.0x	20.7x	14.9x	13.2x	1.9x	1.7x	1.6x
Human Capital Service Providers										
Ceridian HCM Holding, Inc.	8,093	>50	40.7x	32.6x	NEG	>50	>50	7.9x	6.6x	5.7x
Aon Plc Class A	63,980	16.7x	15.8x	14.8x	45.6x	19.1x	17.2x	5.2x	5.0x	4.7x
Automatic Data Processing, Inc.	87,315	22.8x	19.7x	17.9x	33.7x	27.8x	24.9x	5.8x	5.1x	4.8x
Paychex, Inc.	41,791	25.3x	19.8x	18.5x	38.7x	29.8x	27.7x	10.3x	8.8x	8.3x
Human Capital Service Providers Average		18.5x	21.0x	18.5x	39.3x	24.7x	22.2x	6.2x	5.5x	5.0x
Information Services										
Broadridge Financial Solutions, Inc.	19,943	17.1x	15.2x	14.4x	28.9x	20.0x	18.4x	3.9x	3.4x	3.3x
Dye & Durham Ltd.	2,476	15.6x	10.2x	8.6x	0.1x	0.1x	0.1x	6.6x	4.3x	3.8x
Deluxe Corporation	2,481	6.7x	5.7x	5.5x	14.8x	4.7x	4.4x	1.2x	1.1x	1.1x
Information Services Corp.	392	5.8x	7.1x	6.7x	10.2x	11.9x	12.0x	2.3x	2.3x	2.2x
Information Services Average		11.3x	9.6x	8.8x	13.5x	9.1x	8.7x	3.5x	2.8x	2.6x
Software Focused IT Solutions/VARs										
Softcat Plc (£)	2,482	20.0x	17.8x	16.8x	26.3x	23.9x	23.4x	NA	NA	NA
Crayon Group Holding ASA (NOK)	12,669	23.5x	13.8x	11.0x	48.2x	23.3x	17.9x	NA	NA	NA
Bytes Technology Group Plc (£)	877	23.3x	17.3x	15.8x	47.9x	25.2x	24.2x	NA	NA	NA
SoftwareONE Holding Ltd. (CHF)	1,218	8.1x	5.1x	4.4x	14.4x	13.7x	11.5x	NA	NA	NA
Converge Technology Solutions Corp	1,102	11.7x	7.6x	6.3x	>50	31.9x	19.6x	NA	NA	NA
Softchoice Corporation*	1,063	15.4x	11.3x	9.5x	23.3x	21.0x	17.3x	NA	NA	NA
Software Focused IT Solutions/VARs Average		17.0x	12.1x	10.6x	32.0x	23.2x	19.0x	NA	NA	NA
Diversified Real Estate Services										
Colliers International Group Inc.	5,753	10.5x	9.1x	8.2x	-11.4x	14.0x	12.9x	1.4x	1.3x	1.2x
Altus Group Limited	2,293	20.9x	17.4x	15.3x	23.2x	28.3x	18.7x	3.7x	3.1x	2.9x
CBRE Group, Inc. Class A	25,727	12.0x	8.0x	7.3x	12.9x	11.2x	10.2x	0.9x	0.8x	0.7x
Jones Lang LaSalle Incorporated	11,110	7.6x	7.4x	7.0x	8.8x	8.0x	7.4x	0.6x	0.5x	0.5x
Diversified Real Estate Services Average		12.8x	10.4x	9.4x	8.4x	15.4x	12.3x	1.6x	1.4x	1.3x
Business Services Average										
		15.1x	13.6x	12.0x	22.1x	17.2x	14.9x	4.0x	3.4x	3.1x

*Share price converted to USD.

Source: FactSet and CIBC World Markets Inc.

Exhibit 7: SaaS Stocks – Comp Table, 2021 - 2023E (\$MM)

	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		
								C21A	C22E	C23E
Tier 1 SaaS (Rule of 40 > 60)										
Lightspeed POS, Inc.*	137%	-17%	37%	-8%	120%	29%	2,617	11.8x	3.7x	2.8x
Nuvei*	70%	35%	30%	32%	105%	61%	5,220	7.2x	5.4x	4.2x
CrowdStrike Holdings, Inc.	66%	31%	48%	30%	97%	78%	39,396	45.1x	18.4x	13.4x
Zoom Video Communication	29%	36%	11%	29%	65%	41%	28,678	10.8x	6.4x	5.6x
Zscaler, Inc.	61%	22%	41%	21%	83%	62%	21,872	32.5x	17.6x	13.2x
Veeva Systems Inc	26%	44%	17%	36%	70%	53%	27,519	18.8x	12.8x	10.9x
Magnet Forensics*	37%	31%	46%	26%	68%	72%	418	5.9x	4.5x	3.5x
DocuSign, Inc.	45%	23%	17%	19%	68%	37%	12,725	8.8x	5.2x	4.6x
Shopify, Inc.	40%	5%	28%	0%	45%	28%	38,448	8.3x	6.6x	5.1x
HubSpot, Inc.	47%	17%	30%	13%	64%	43%	15,031	11.6x	8.7x	6.8x
Tier 1 SaaS (Rule of 40 > 60) Average								16.1x	8.9x	7.0x
	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		
								C21A	C22E	C23E
Tier 2 SaaS (Rule of 40 b/w 41-60)										
Descartes Systems	22%	40%	12%	35%	62%	48%	5,022	11.8x	10.5x	9.8x
Atlassian Corp. Plc	33%	29%	26%	22%	62%	48%	48,649	23.3x	15.5x	12.1x
ServiceNow, Inc.	29%	31%	26%	30%	61%	56%	95,166	16.1x	12.8x	10.3x
Twilio, Inc.	57%	-4%	32%	-2%	53%	31%	13,166	4.6x	3.4x	2.6x
Qualys, Inc.	15%	46%	18%	31%	61%	49%	4,536	11.0x	9.4x	8.0x
Docebo, Inc.*	54%	-3%	40%	-4%	50%	37%	776	7.4x	5.3x	3.9x
MongoDB, Inc.	48%	1%	37%	0%	49%	37%	18,900	32.0x	16.1x	12.1x
Dropbox, Inc.	12%	34%	7%	34%	47%	41%	9,007	4.2x	3.9x	3.6x
Workday, Inc.	21%	26%	20%	18%	47%	38%	33,262	7.7x	5.4x	4.6x
Tier 2 SaaS (Rule of 40 b/w 41-60) Average								13.1x	9.1x	7.5x
	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		
								C21A	C22E	C23E
Tier 3 SaaS (Rule of 40 b/w 25-40)										
Avalara Inc	38%	6%	22%	2%	44%	24%	6,295	9.0x	7.2x	5.9x
Zendesk, Inc.	31%	12%	26%	12%	43%	38%	7,377	5.5x	4.3x	3.5x
Paylocity Holding Corp.	32%	16%	25%	14%	48%	39%	9,416	14.8x	10.0x	8.2x
RingCentral, Inc.	35%	7%	24%	8%	42%	32%	6,544	4.1x	3.3x	2.6x
VMware, Inc.	8%	28%	7%	27%	36%	34%	58,114	4.9x	4.3x	4.0x
BlackLine, Inc.	21%	11%	24%	6%	32%	30%	4,414	10.4x	8.4x	6.9x
Rapid7 Inc.	32%	6%	26%	9%	38%	35%	4,491	8.4x	6.5x	5.3x
Five9, Inc.	37%	0%	24%	3%	37%	27%	6,972	11.4x	9.0x	7.3x
Akamai Technologies, Inc.	7%	25%	6%	23%	32%	30%	17,351	5.0x	4.7x	4.4x
Wix.com Ltd.	22%	1%	12%	2%	23%	14%	3,460	2.7x	2.4x	2.1x
Tier 3 SaaS (Rule of 40 b/w 25-40) Average								7.6x	6.0x	5.0x
	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		
								C21A	C22E	C23E
Tier 4 SaaS (Rule of 40 <28										
Ceridian HCM Holding, Inc.	30%	-1%	17%	8%	29%	25%	7,932	7.7x	6.5x	5.6x
Q4 Inc.	26%	-27%	40%	-11%	-1%	29%	69	1.3x	1.0x	0.8x
Teradata Corporation	2%	25%	-7%	21%	26%	14%	4,023	2.1x	2.2x	2.1x
Q2 Holdings Inc.	21%	3%	17%	2%	24%	19%	2,507	5.0x	4.3x	3.6x
Splunk Inc.	24%	7%	23%	14%	30%	37%	17,621	7.9x	5.4x	4.4x
Zuora, Inc.	14%	7%	20%	0%	20%	20%	1,005	3.3x	2.5x	2.2x
LivePerson, Inc.	24%	-18%	17%	-12%	6%	5%	1,329	2.8x	2.4x	2.0x
Yext, Inc.	10%	4%	4%	-1%	14%	3%	530	1.5x	1.3x	1.2x
Kinaxis, Inc.*	21%	5%	19%	1%	26%	20%	2,714	10.8x	7.8x	6.9x
New Relic, Inc.	18%	-1%	18%	0%	17%	18%	3,093	4.6x	3.5x	3.0x
Tier 4 SaaS (Rule of 40 <28 Average								4.7x	3.7x	3.2x
SaaS Average								10.3x	6.9x	5.6x

*Share price converted to USD.

Source: FactSet and CIBC World Markets Inc.

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