

EQUITY RESEARCH

July 6, 2023

Industry Update

Legal Matters – Bits & Bytes Weekly

Finding A Niche In A Crowded Market

Our Conclusion

In today's age, the adoption and integration of new technologies is critical to sustained operational success. However, many new technologies can present challenges when the risk of their misuse or their inability to live up to expectations meets or exceeds the risk of not adopting them. Enter ChatGPT, the now familiar natural-language processing tool open to the public and trained on databases from the internet. For industries that rely heavily on accuracy such as law, healthcare, education and finance – to name a few – ChatGPT is a double-edged sword. The tool can be used to maximize productivity, but the data used to train the AI may be biased, misleading, or inaccurate. As such, an opportunity has arisen for entrepreneurs and developers to create generative AI tools specific to these sectors, and AI start-ups are taking advantage of these niches.

Key Points

Broad-Based GenAI Use Can Be Challenging: ChatGPT is a helpful tool for tasks such as composing emails and essays, summarizing content, and other productivity use cases. However, when it comes to more specific use cases – such as preparing legal filings – the use of broad-based generative AI technologies can create more issues than it solves. Case in point, a lawyer who used ChatGPT to prepare a legal filing is now facing potential sanctions after the AI bot provided falsified cases which the attorney then presented in court. In the healthcare sector, where flawed AI can have even more grim effects, the WHO issued a statement on the risks of using untested large language models (LLMs) in public healthcare, calling for rigorous oversight of their use.

GenAI Start-ups Addressing Niches: There is opportunity for generative AI start-ups to focus on addressing niche markets such as law and healthcare where AI can be trained on specific/proprietary material. Legal-focused AI start-ups have already popped up: Evenup, an AI powered software for personal injury lawyers, recently received a \$350 million valuation in a Series B round, and Harvey, an AI assistant for lawyers, recently received a \$150 million valuation in a Series A. Healthcare AI start-ups are more fragmented; however, Hippocratic AI recently raised \$50 million in seed funding to build artificial intelligence models for the healthcare industry.

Incumbents Looking To Acquire: These niche GenAI start-ups may well stand to become acquisition targets as incumbent firms race to maintain their market shares, willing to spend to get ahead. Last week, Thomson Reuters [acquired Casetext](#), a California-based provider of a generative AI-powered legal assistant named CoCounsel, for \$650 million. Databricks announced it will pay \$1.3 billion to acquire MosaicML, a start-up with a platform that enables organizations to train LLMs and deploy generative AI tools based on them. Salesforce Ventures announced the company would double the size of its generative AI fund to \$500MM, and PwC US recently announced plans to invest \$1B over the next three years in AI projects.

All figures in Canadian dollars unless otherwise stated.

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

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

Erin Kyle, CPA
+1 416-313-9851
Erin.Kyle@cibc.com

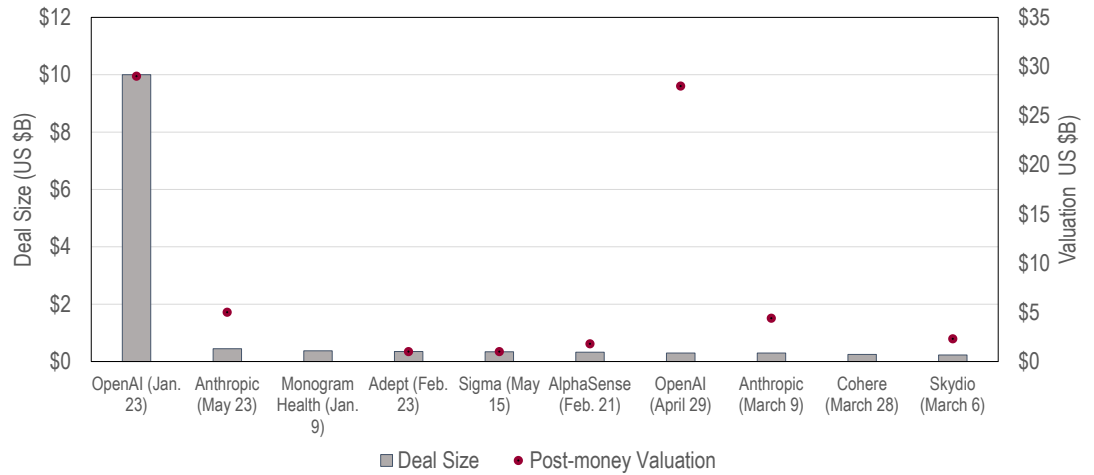
Sam Schmidt, CPA
+1 416-980-5448
sam.schmidt@cibc.com

Sector:
Information Technology

Generative AI Funding

The AI sector has gained the attention of venture capitalists, with roughly \$1.7B generated across 46 deals for AI start-ups in Q1/23, according to Pitchbook data, with an additional \$10.68B in deals announced but not yet closed. The bar chart in Exhibit 1 shows the top global VC deals in AI and machine learning in 2023 so far by deal size, as well as their post-money valuation. The two largest, OpenAI and Anthropic, are GenAI companies, with OpenAI best known for the creation of Chat-GPT, and Anthropic the creator of Claude, a generative AI assistant that can be incorporated into workplace collaboration platforms such as Slack.

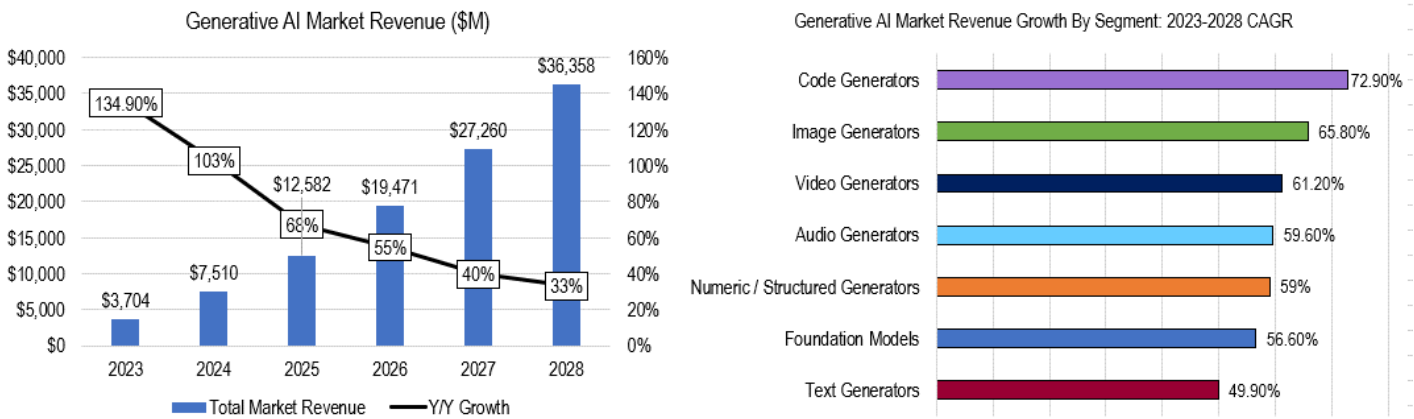
Exhibit 1: Top Global VC Deals In AI & ML, 2023



Source: Axios Pro.

The GenAI market is expected to continue to grow over the next five years. According to a recent article published by S&P Global, forecasted revenue for generative AI technology offerings is expected to exceed \$3.7 billion in 2023, growing to \$36 billion by 2028 (lefthand chart, Exhibit 2).

Exhibit 2: S&P Global, Generative AI Market



Source: S&P Global.

News Impacting Our Coverage

Research Highlight: Saskatchewan Registry MSA Extended To 2053; Includes Additional Revenue Opportunities

Information Services Corp announced it has extended its agreement with the Province of Saskatchewan and will be the exclusive provider of registry services for the province until 2053, adding an additional 20 years to the current agreement for a total cost of \$300 million. The extension gives ISV the right to charge additional fees that are expected to lead to \$16 million in pro forma adjusted EBITDA, a 24% increase on our prior 2024 estimates and a 500bps lift to consolidated EBITDA margins. The deal tilts ISV's revenue mix back above 50% registry, a positive development given the low-risk and high-cash-flow profile of the registry assets. While M&A will be limited while leverage remains elevated in the wake of the deal, we view the transaction as an effective use of capital given the margin and cash flow accretion.

Telus International Chief Commercial Officer To Retire

Telus International announced the retirement of Maria Pardee, Chief Commercial Officer, effective December 31, 2023. Maria Pardee joined Telus International in February 2021, with more than 25 years of leadership experience in the technology industry. Through the end of 2023, Ms. Pardee will continue to support the company's commercial team, and facilitate a transition to her successor. Ms. Pardee will serve as strategic advisor to TELUS International through the end of 2024.

CloudMD Sells Non-core US Assets To Constellation Division For \$6.3 Million

CloudMD Software & Services Inc. announced that it has closed the sale of its US-based electronic medical records, practice management, and revenue cycle management assets to a subsidiary of N Harris Computer Corporation, an operating group of Constellation Software, for US\$6.3 million.

Softchoice wins Two Categories Of FY23 Microsoft Canada Impact Awards

Microsoft Canada recognised Softchoice as the 2023 winner for the National Large Service Provider and National Cloud Solution Provider impact awards. Softchoice was also runner-up for the Modern Marketing and Modern Workplace impact awards, and previously won the Surface Partner of the Year for North America in 2021, and Partner of the Year for Canada in 2020.

Exhibit 3: CIBC Coverage – Price Returns, For The Period Ending July 6, 2023

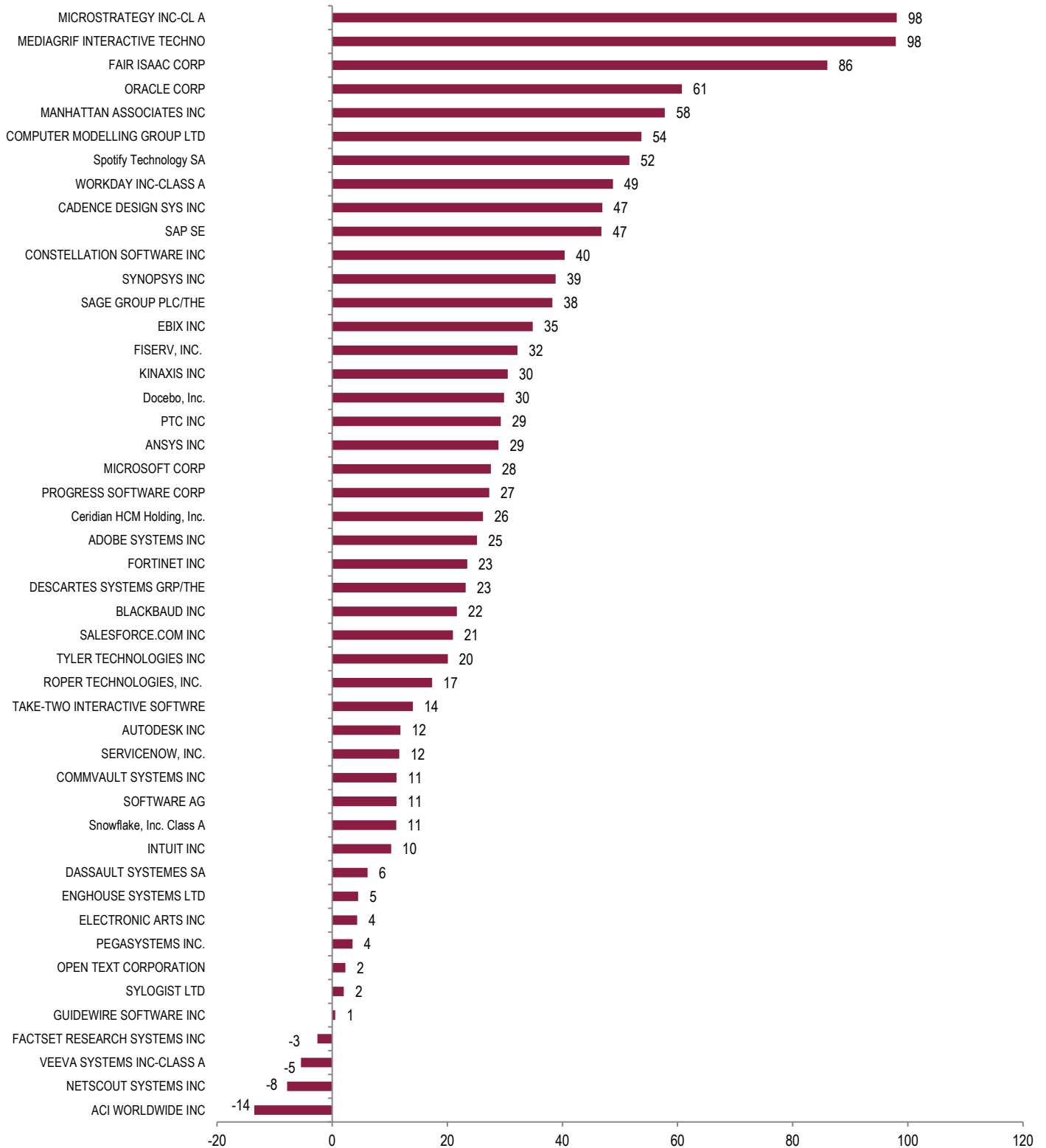
Software & Systems	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
Constellation Software Inc	2,643.72	(2.2)	(5.2)	2.3	23.0	40.4	27.6	2817.38	1747.83
Descartes Systems	77.05	0.5	0.1	(4.0)	10.3	19.8	10.6	82.02	61.26
Enghouse Systems Limited	31.09	(0.6)	(16.7)	(20.8)	(16.0)	4.5	(13.6)	44.59	27.30
Open Text Corp	39.85	(0.1)	(7.7)	4.2	30.8	2.3	34.4	43.25	24.91
Kinaxis	184.47	4.6	(3.1)	0.8	26.4	30.5	21.4	191.80	124.90
Docebo, Inc.	50.04	0.4	5.0	(1.8)	14.9	29.8	11.8	55.72	31.66
Dye & Durham	18.02	(0.9)	16.4	8.0	5.0	(14.6)	9.8	23.14	11.62
Altus Group	43.35	(1.0)	(8.6)	(23.2)	(25.2)	(4.5)	(19.8)	61.60	40.00
Q4 Inc.	3.31	0.0	(2.1)	(14.2)	28.8	NA	3.1	4.90	1.88
Average		0.1	(2.4)	(5.4)	10.9	13.5	9.5		

Business Services	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
CGI Group Inc	137.82	0.2	(2.4)	6.0	21.0	30.2	18.1	142.31	100.74
Converge Technologies	3.17	1.6	(11.5)	(18.7)	(30.2)	(37.1)	(30.9)	7.51	2.59
Information Services Corp	24.95	17.9	18.5	11.2	6.2	21.1	3.2	25.36	19.12
Softchoice Corporation	16.79	(0.4)	(3.3)	(8.1)	(7.7)	(25.6)	(8.1)	25.56	13.57
Telus International	19.65	(0.2)	(9.6)	(25.7)	(26.3)	(41.8)	(26.5)	40.55	18.86
Average		0.3	(6.7)	(11.6)	(10.8)	(18.6)	(11.8)		

Indices	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD
S&P/TSX Composite Index	19,782.67	(0.7)	(1.4)	(2.0)	(0.2)	5.6	2.1
S&P 500 Index	4,395.09	(0.0)	2.6	7.1	12.8	14.3	14.5
S&P/TSX Software Index	185.32	(1.3)	(3.2)	11.7	32.8	40.5	35.9
S&P500 Software Index	5,688.97	0.5	2.1	15.2	44.3	26.9	38.9

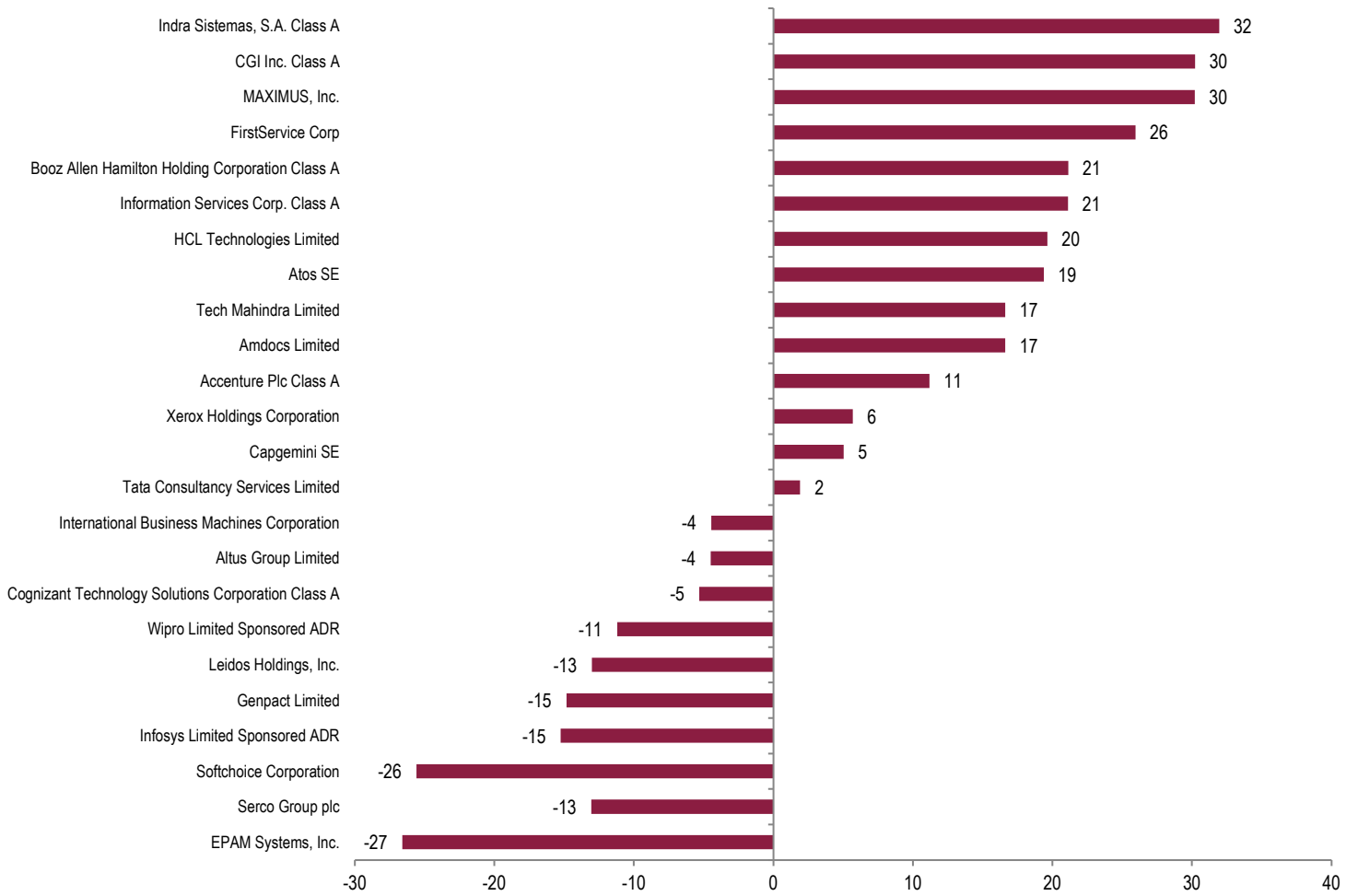
Source: Company reports, FactSet and CIBC World Markets Inc.

Exhibit 4: Software Stocks – Return Performance (%), 7/6/2022–7/6/2023



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

Exhibit 5: Business Services Stocks – Return Performance (%), 7/6/2022–7/6/2023



Source: Company reports, 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
Enterprise Application Software										
Constellation Software Inc.*	44,003	6.6x	5.6x	5.0x	25.9x	21.9x	19.4x	34.9x	32.2x	28.2x
BlackBerry Limited*	2,877	4.3x	2.6x	2.8x	NEG	>50	>50	NEG	NEG	NEG
Sage Group plc	10,002	5.0x	4.5x	4.2x	21.9x	19.3x	17.3x	33.6x	28.3x	25.2x
Tyler Technologies, Inc.	17,885	9.7x	9.1x	8.4x	37.6x	37.3x	33.3x	>50	>50	46.7x
Roper Technologies, Inc.	56,710	10.6x	9.4x	8.8x	25.9x	23.2x	21.6x	33.3x	29.1x	27.0x
Enghouse Systems Limited	1,501	3.5x	3.47x	3.42x	10.9x	11.2x	10.30x	15.7x	24.3x	21.56x
Oracle Corporation	397,896	8.5x	7.6x	7.0x	17.2x	15.3x	13.6x	22.9x	21.3x	19.1x
SAP SE	152,477	4.6x	4.9x	4.5x	19.3x	16.6x	14.5x	29.7x	23.2x	19.6x
Enterprise Application Software Average		6.6x	5.9x	5.5x	22.7x	20.7x	18.6x	28.4x	26.4x	26.8x

Extended ERP										
Adobe Incorporated	216,874	12.2x	11.0x	9.8x	24.9x	22.7x	20.5x	34.5x	30.3x	26.8x
Open Text Corporation	18,834	5.3x	3.4x	3.1x	15.1x	10.9x	8.1x	12.6x	15.5x	7.4x
Manhattan Associates, Inc.	11,682	15.2x	13.6x	12.1x	>50	>50	44.4x	>50	>50	>50
Pegasystems Inc.	4,709	3.6x	3.4x	3.1x	>50	27.3x	18.0x	>50	37.5x	24.3x
Software AG	2,586	2.7x	2.6x	2.4x	14.5x	15.0x	12.6x	35.1x	22.5x	18.9x
Fiserv, Inc.	97,851	5.8x	5.4x	5.1x	13.5x	12.4x	11.4x	19.1x	16.8x	14.8x
Extended ERP Average		7.5x	6.6x	5.9x	17.0x	17.6x	19.2x	25.3x	24.5x	18.4x

Software As A Service										
Descartes Systems Group Inc.	6,365	13.1x	11.3x	10.3x	29.6x	26.0x	22.7x	>50	>50	49.3x
Kinaxis, Inc.*	3,715	10.1x	8.6x	7.2x	46.8x	>50	44.2x	>50	>50	>50
Docebo, Inc.*	1,032	7.2x	5.7x	4.4x	>50	>50	33.8x	>50	>50	>50
Lightspeed Commerce Inc*	1,710	2.5x	2.0x	1.6x	NEG	NEG	45.4x	NEG	>50	>50
Veeva Systems Inc Class A	28,170	13.2x	12.0x	10.1x	34.3x	33.9x	27.2x	46.0x	42.8x	36.1x
Shopify, Inc. Class A	75,767	13.5x	11.3x	9.6x	>50	>50	>50	>50	>50	>50
Q4 Inc*	77	1.4x	1.4x	1.2x	NEG	NEG	NEG	NEG	NEG	NEG
Ceridian HCM Holding, Inc.	10,609	8.5x	7.1x	6.2x	42.4x	28.5x	22.9x	>50	>50	40.2x
ServiceNow, Inc.	110,112	15.2x	12.5x	10.2x	48.2x	40.3x	31.9x	>50	>50	46.4x
Workday, Inc. Class A	53,782	8.8x	7.5x	6.5x	34.2x	28.2x	23.4x	>50	42.0x	34.6x
Software As A Service Average		9.4x	7.9x	6.7x	39.2x	31.4x	31.5x	>50	>50	>50

Infrastructure Vendors										
Microsoft Corporation	2,497,619	12.2x	11.2x	9.9x	24.8x	22.6x	19.5x	36.0x	32.9x	28.6x
Infrastructure Vendors Average		12.2x	11.2x	9.9x	24.8x	22.6x	19.5x	36.0x	32.9x	28.6x

Software Average		8.1x	7.1x	6.3x	27.1x	22.9x	23.5x	29.5x	28.5x	28.6x
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*Share Price Converted to USD

Note: Bolded names are covered by CIBC World Markets Inc.

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

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

	Enterprise Value (\$mlns.)	EV/EBITDA			P/E			EV/S		
		C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Business & IT Services										
CGI Inc. Class A	35,021	13.5x	12.3x	11.4x	22.0x	18.9x	17.9x	2.6x	2.4x	2.3x
TELUS International (CDA), Inc.	5,781	9.5x	8.2x	7.1x	11.9x	11.7x	9.8x	2.3x	1.9x	1.7x
Accenture Plc Class A	199,206	17.3x	16.7x	15.5x	27.9x	25.8x	23.9x	3.2x	3.1x	2.9x
Booz Allen Hamilton	17,221	17.3x	16.0x	14.9x	24.9x	23.0x	20.7x	1.9x	1.7x	1.6x
CACI International Inc Class A	9,717	14.3x	13.2x	12.4x	18.7x	17.5x	15.8x	1.5x	1.4x	1.3x
DXC Technology Co.	8,979	3.7x	4.0x	3.9x	7.5x	6.9x	6.0x	0.6x	0.6x	0.6x
Genpact Limited	7,847	10.0x	9.4x	8.4x	13.5x	12.6x	11.2x	1.8x	1.7x	1.5x
International Business Machines	164,961	10.4x	11.1x	10.6x	14.4x	14.0x	13.2x	2.7x	2.7x	2.6x
Atos SE	3,271	3.8x	3.0x	2.9x	NEG	5.5x	4.5x	0.3x	0.3x	0.3x
Capgemini SE	34,359	9.8x	9.4x	8.7x	14.5x	14.9x	13.4x	1.6x	1.5x	1.4x
Sopra Steria Group SA	4,862	8.2x	7.2x	6.6x	12.9x	10.5x	9.1x	1.0x	0.9x	0.8x
Converge Technology Solutions Corp	979	6.9x	5.8x	5.4x	29.9x	49.9x	34.4x	0.5x	0.4x	0.4x
Business & IT Services Average		10.7x	10.0x	9.3x	16.8x	14.7x	13.2x	1.8x	1.6x	1.6x
HR Outsourcing										
		EV/EBITDA			P/E			EV/S		
Ceridian HCM Holding, Inc.	10,609	42.4x	28.5x	22.9x	>50	>50	40.2x	8.5x	7.1x	6.2x
Willis Towers Watson	28,589	12.0x	11.9x	10.7x	17.1x	16.0x	13.6x	3.2x	3.1x	2.9x
Aon Plc Class A	79,674	20.0x	18.4x	17.1x	25.3x	23.6x	21.0x	6.4x	6.0x	5.7x
Automatic Data Processing, Inc.	92,986	20.1x	18.1x	16.5x	29.0x	25.8x	23.3x	5.4x	5.0x	4.7x
Paychex, Inc.	39,644	18.5x	17.1x	15.9x	27.6x	24.9x	23.0x	8.2x	7.6x	7.2x
HR Outsourcing Average		22.6x	18.8x	16.6x	24.7x	22.6x	24.2x	6.3x	5.8x	5.3x
Information Services										
		EV/EBITDA			P/E			EV/S		
Broadridge Financial Solutions, Inc.	23,040	17.6x	16.3x	15.1x	24.3x	22.5x	20.5x	3.9x	3.7x	3.5x
Dye & Durham Ltd.	2,252	14.2x	12.8x	10.4x	0.1x	0.1x	0.1x	4.7x	4.8x	4.5x
Deluxe Corporation	2,107	5.0x	5.2x	5.1x	4.2x	5.5x	5.2x	0.9x	1.0x	0.9x
Information Services Corp	482	7.5x	7.3x	7.0x	12.4x	11.9x	11.1x	2.5x	2.4x	2.3x
Information Services Average		11.1x	10.4x	9.4x	10.3x	10.0x	9.2x	3.0x	2.9x	2.8x
Financial Services Technology										
		EV/EBITDA			P/E			EV/S		
Fidelity National Information Services	53,210	8.6x	8.8x	8.2x	8.8x	9.9x	9.0x	3.7x	3.7x	3.5x
Fiserv, Inc.	97,851	13.5x	12.4x	11.4x	19.1x	16.8x	14.8x	5.8x	5.4x	5.1x
Jack Henry & Associates, Inc.	12,138	19.3x	17.7x	16.3x	33.5x	32.2x	29.1x	6.1x	5.7x	5.3x
ACI Worldwide, Inc.	3,470	9.3x	9.0x	8.4x	18.1x	23.7x	15.5x	2.4x	2.4x	2.3x
Temenos AG	5,801	15.8x	15.0x	13.2x	23.9x	22.3x	19.3x	6.1x	5.8x	5.3x
Global Payments Inc.	39,600	10.1x	9.2x	8.5x	11.1x	10.0x	8.7x	4.9x	4.6x	4.3x
Financial Services Technology Average		12.8x	12.0x	11.0x	19.1x	19.1x	16.1x	4.8x	4.6x	4.3x
Diversified Real Estate Services										
		EV/EBITDA			P/E			EV/S		
Colliers International Group Inc.	6,093	9.7x	9.1x	8.3x	13.9x	14.3x	12.6x	1.4x	1.4x	1.3x
Altus Group Limited	2,131	15.7x	15.6x	12.2x	22.8x	21.1x	18.4x	2.9x	2.7x	2.4x
CBRE Group, Inc. Class A	27,216	9.3x	10.6x	9.4x	14.2x	16.9x	14.0x	0.9x	0.9x	0.8x
Jones Lang LaSalle Incorporated	9,765	7.8x	9.4x	7.5x	9.7x	12.5x	9.2x	0.5x	0.4x	0.4x
Diversified Real Estate Services Average		10.6x	11.2x	9.4x	15.1x	16.2x	13.5x	1.4x	1.3x	1.2x
Software Focused IT Solutions/VARs										
		EV/EBITDA			P/E			EV/S**		
Softchoice Corporation* USD	837	10.2x	9.7x	8.7x	15.8x	16.4x	14.6x	2.7x	2.5x	2.3x
Softcat Plc*	2,621	15.3x	13.6x	12.5x	20.4x	19.0x	17.9x	6.3x	5.3x	4.7x
Crayon Group Holding ASA*	10,764	>50	>50	>50	>50	>50	>50	24.3x	20.6x	17.8x
Bytes Technology Group Plc*	1,164	17.0x	14.8x	13.0x	22.7x	20.8x	18.6x	NA	NA	NA
Bytes Technology Group Plc* Average		14.2x	12.7x	11.4x	19.7x	18.7x	17.0x	11.1x	9.5x	8.3x
Business Services Average		13.2x	12.1x	10.9x	17.5x	16.5x	15.3x	4.0x	3.6x	3.4x

*Share Price Converted to USD

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

Note: Bolded names are covered by CIBC World Markets Inc.

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

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Neutral	NT	Stock is expected to perform in line with similar stocks in the coverage universe during the next 12-18 months.
Underperformer	UN	Stock is expected to underperform similar stocks in the coverage universe during the next 12-18 months.
Tender	TR	Shareholders are advised to tender shares to a specific offer as we do not believe a superior offer will materialize.
Not Rated	NR	CIBC World Markets does not maintain an investment recommendation on the stock.
Restricted	R	CIBC World Markets is restricted (due to potential conflict of interest) from rating the stock.

Sector Ratings	Abbreviation	Description
Overweight	O	Sector is expected to outperform the broader market averages.
Marketweight	M	Sector is expected to equal the performance of the broader market averages.
Underweight	U	Sector is expected to underperform the broader market averages.
None	NA	Sector rating is not applicable.

Note: Broader market averages refer to S&P 500 in the U.S. and S&P/TSX Composite in Canada.

CIBC World Markets Inc. Price Chart

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