

EQUITY RESEARCH

February 2, 2023

Industry Update

Q4/22 U.S. Earnings Recap – Bits & Bytes Weekly

An Overview Of Large Cap U.S. Tech Reporting

Our Conclusion

Q4 earnings from the U.S. tech giants have been generally well received by the market, as the overall demand environment remained resilient in the quarter with revenue in line with expectations. On profitability, earnings have skewed somewhat to the downside as inflationary pressures persist, leading to EBITDA that was on average 3% below Street. The global demand outlook and forward guidance have also been a focus of quarterly calls, with some management teams striking a cautionary tone while others see the environment improving. Another common theme in the quarter was layoffs, with the majority of Big Tech having announced workforce restructurings. Similar to Q3, we saw outsized market reactions on earnings misses and beats. SNAP was down 14% post earnings, given worsening competitive headwinds and widening losses, while Meta opened up 20%, on the strength of better-than-expected revenue and a constructive 2023 outlook.

Quick Recaps

Microsoft (MSFT): MSFT reported results that included a slight miss on revenue and EBITDA and a 5% beat on EPS. Growth moderated across the business, and management guided to a softer upcoming quarter given continued weakness in PC sales, softening of Office365 demand, and commentary that cloud growth had slowed in December despite outpacing Street estimates in FQ2. Microsoft also announced that it would be laying off 10,000 employees, under 5% of the workforce.

Netflix (NFLX): Netflix report a strong Q4, which saw in-line revenue but net subscriber adds well above consensus. A strong programming slate and recent strategic shifts around cracking down on password sharing and an ad-supported tier have opened up avenues for new subscriber growth and should help drive top-line growth in the near term, according to management.

Meta (META): Meta’s outlook for 2023 was a positive one, with the business expected to return to growth and improve its cost profile going forward, with investments focused on the core social media apps. With Meta shares under pressure from digital ad revenue headwinds and metaverse spending, the outlook worked to ease investor concerns. The company also noted that the margin benefits from restructuring should start to be felt in CQ1/23. Meta also announced an increase to its share purchase authorization to \$40B.

IBM: IBM reported flat Y/Y revenue growth (6.3% in constant currency), beating expectations by 3%. On a constant currency basis, IBM’s software segment was up 8% Y/Y, the infrastructure segment up 7% Y/Y and the consulting segment up 9% Y/Y. Management commentary noted that clients are looking to continue new development work and guided towards 2023 constant currency revenue growth in the mid single digits.

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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.

Exhibit 1: Software & Services – U.S. Earnings Actual Vs. Expectations, Q4/22

Software

Company	Calendar Q4/22			Y/Y Change			Consensus			Surprise (%)		
	Revenue (\$M)	EBITDA (\$M)	EPS (\$)	Revenues (%)	EBITDA (%)	EPS (%)	Revenues (\$M)	EBITDA (\$M)	EPS (\$)	Revenue	EBITDA	EPS
Microsoft	52,747	24,847	2.35	2%	-3%	-5%	52,987 ↓	24,452 ↑	2.29 ↑	0%	2%	3%
Meta	32,165	15,979	1.76	-4%	-6%	-52%	31,551 ↑	12,920 ↑	2.26 ↓	2%	24%	-22%
Netflix	7,852	797	0.38	2%	0%	-75%	7,862 ↓	569 ↑	0.56 ↓	0%	40%	-32%
Snap	1,300	233	-0.18	0%	-29%	-100%	1,306 ↓	205 ↑	0.11 ↓	-0.5%	14%	-36%
SAP SE (€)	9,156	3,199	1.09	2.9%	2.7%	-47.3%	9,030 ↑	3,233 ↓	1.45 ↓	1%	-1%	-25%
Average				1.4%	-2.8%	-40.8%				0.0%	11.4%	-18.7%

**Averages exclude SNAP

IT Services

Company	Calendar Q4/22			Y/Y Change			Consensus			Surprise (%)		
	Revenue (\$M)	EBITDA (\$M)	EPS (\$)	Revenues (%)	EBITDA (%)	EPS (%)	Revenues (\$M)	EBITDA (\$M)	EPS (\$)	Revenue	EBITDA	EPS
IBM	16,690	4,860	3.60	0%	-33%	7%	16,151 ↑	5,009 ↓	3.59 ↑	3%	-3%	0%
Infosys Limited (US)	4,698	1,149	0.19	11%	1%	6%	4,612 ↑	1,129 ↑	0.19 -	2%	2%	0%
Tata Consultancy Services (Rs)	578,620	155,540	29.64	18%	16%	12%	573,326 ↑	152,609 ↑	6 ↓	1%	2%	-1%
Wipro (Rs)	232,290	46,460	5.56	14%	8%	3%	234,307 ↓	42,833 ↑	5.30 ↑	-1%	8%	5%
Average				10.8%	-2.0%	7.0%				1.3%	2.3%	0.9%

Source: Company reports and CIBC World Markets Inc.

News Impacting Our Coverage

Research Highlight – CGI – [IP & Managed Services Driving Growth](#)

CGI's solid FQ1 results illustrate the company's resiliency in an uncertain market, with client demand accelerating for its cost-savings and digitization initiatives. CGI continues to post organic growth well above historical rates as it benefits from investments in IP and managed services capacity. While margins were down 80 bps Y/Y, we expect margin improvement through F2023 as recent bookings flow through to revenue, global delivery centres drive cost savings, and the company benefits from merger synergies from the \$600MM in M&A completed last year. We regard CGI as well positioned to continue to execute on M&A, with management planning to allocate \$1B in capital to M&A in F2023 and noting a pipeline that includes larger deals.

Research Highlight – Thomson Reuters: [What An ESG Acquisition Might Look Like](#)

With TRI's multi-year Change Program reaching its final year, the business is well positioned with the financial and operational capacity to expand into a new service vertical or extend into new verticals through acquisition. Recent commentary from management has pointed to ESG as a potential new product area given TRI's expertise in areas with complex rules, regulations and data inputs. The recently announced \$1B sale of LSEG shares to Microsoft gives TRI a significant amount of available liquidity in the near term (~\$6.5B by year-end 2023) to acquire a business with enough scale to make a meaningful contribution. However, given the relatively small size of the ESG data and software market, we expect that an ESG acquisition would be more of an expansion of the Corporates vertical rather than a new vertical in and of itself. Therefore, we view a combination of M&A and capital return as the most likely approach for TRI's liquidity position.

Descartes' Study Reveals 65% Of Companies Plan To Accelerate Supply Chain And Logistics Innovation Investment

Descartes released findings from a [study](#) it conducted that examined how technology innovation is changing supply chain/logistics operations and executives' plans for continued investment. The report found that 59% of companies surveyed accelerated the pace of innovation investment and deployment over the last two years. Moreover, 65% plan to increase their technology spending over the next two years; however, 87% indicated they still face internal inhibitors to supply chain and logistics innovation.

CGI And National Bank Of Canada Extend Business Partnership

CGI will acquire the IP of the bank's in-house financial planning solution currently used by the bank's financial advisors. CGI is also entering into a new, 10-year SaaS agreement for the delivery of the solution to the bank, accelerating its development. This financial planning solution will become a multi-tenant SaaS offering and will contribute to accelerating a similar adoption across the remainder of CGI's IP.

CGI And Laurentian Bank Of Canada Extend Business Partnership

CGI announced a five-year contract extension with the Laurentian Bank of Canada whereby the company will help Laurentian manage its digital transformation process while supporting its efforts to improve and simplify the end-user experience for external and internal customers.

Open Text Buys Micro Focus

Open Text closed the acquisition of Micro Focus, announced in October. The following points were released in conjunction with the closing of the acquisition. Most notably, Open Text will

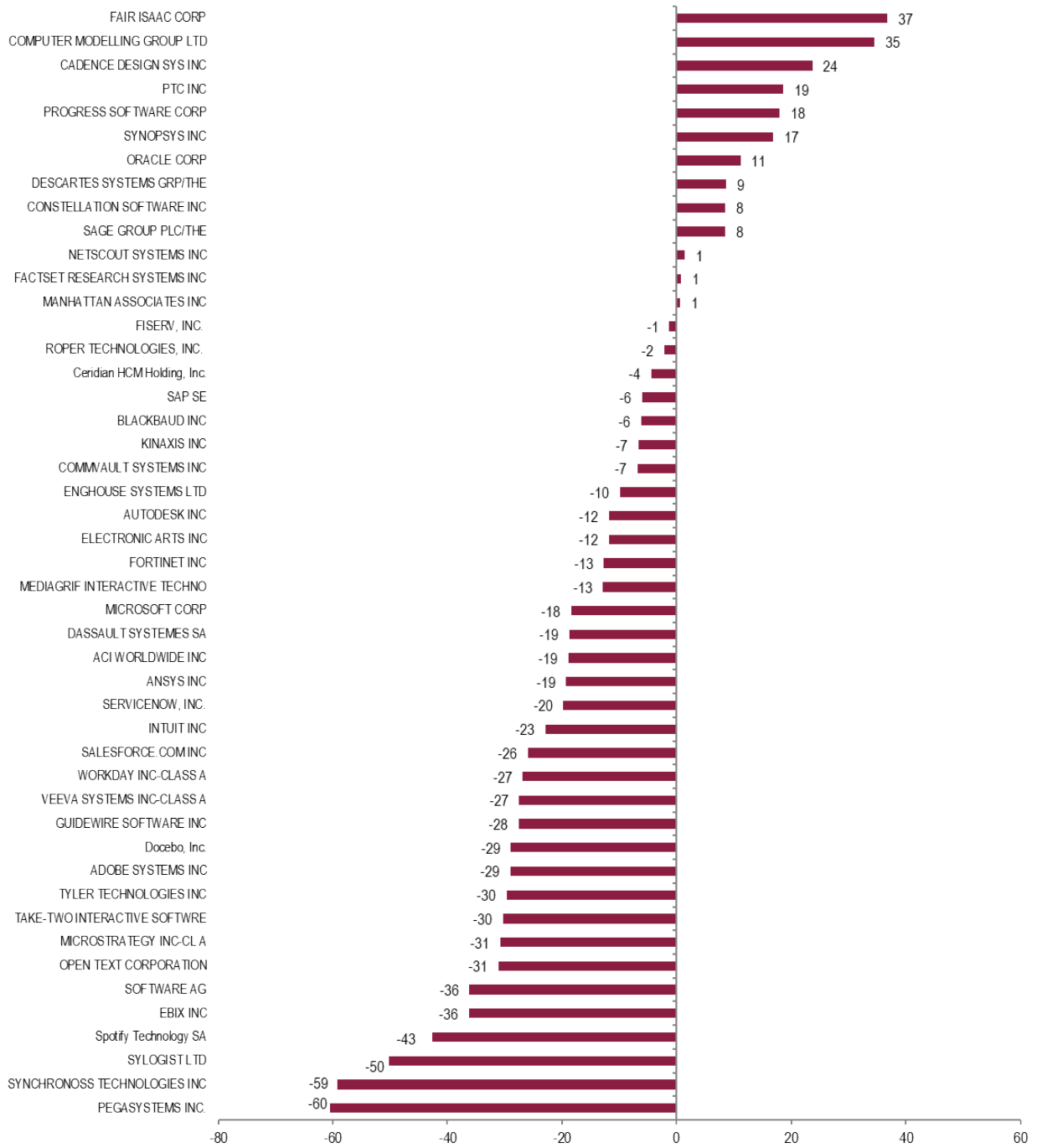
realize a portion of the \$400 million in expected synergies through an 8% workforce reduction after the close of the deal.

- Total purchase price of approximately \$5.8 billion, inclusive of Micro Focus' cash and debt, subject to final adjustments
- Total purchase price is 2.3x Micro Focus' TTM revenues
- Total purchase price is 6.7x Micro Focus' TTM adjusted EBITDA
- Immediately accretive to F'23 adjusted EBITDA dollars
- Expected to be on the OpenText operating model within 6 full quarters or sooner
- Net leverage expected to be less than 3x within 8 full quarters or sooner
- *Consistent with previously announced cost synergies of \$400 million, expect to balance the combined company through an approximate 8% workforce reduction due to the acquisition of Micro Focus*

Q4 Inc. Brings Earnings Calls Into The Future With Seamless Zoom And Microsoft Teams Video Integration

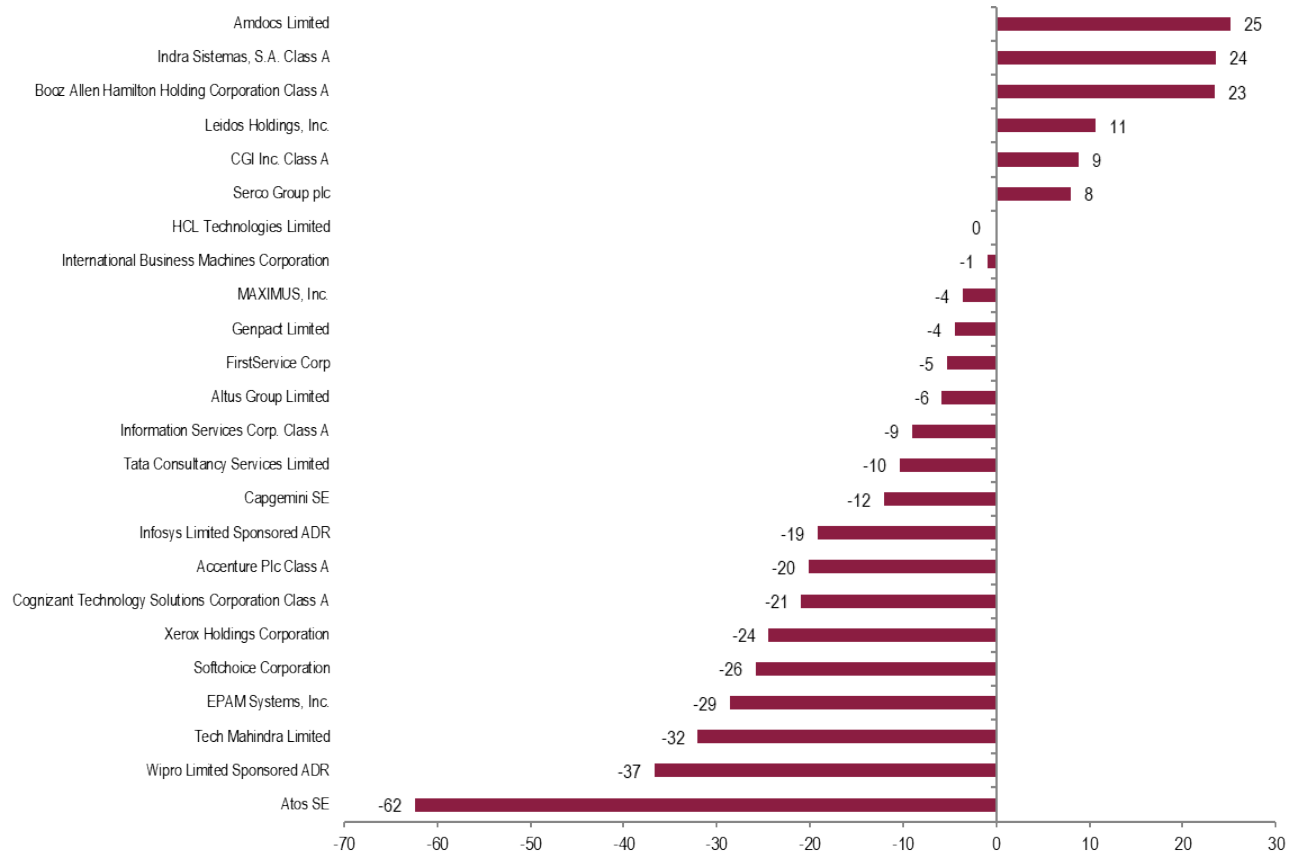
The Q4 Virtual Events Platform now integrates with Zoom and Microsoft Teams, allowing companies to bring their own video to earnings calls. This integration is the most recent enhancement to the platform, following innovative features such as the ability to customize webcast branding, speaker bios, and Q4 Login, which enables users to bypass registration and obtain quick access to events hosted on the platform.

Exhibit 2: Software Stocks – Return Performance (%), 1/2/2022 - 1/2/2023



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

Exhibit 3: Business Services Stocks – Return Performance (%), 1/2/2022 - 1/2/2023



Source: FactSet and CIBC World Markets Inc.

Exhibit 4: Software Stocks – Comp Table, 2022 - 2023E

	Enterprise Value	EV/S			EV/EBITDA			P/E		
		C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Enterprise Application Software										
Constellation Software Inc.*	39,065	6.0x	5.3x	4.5x	23.8x	20.6x	17.6x	32.3x	30.5x	25.6x
BlackBerry Limited*	2,490	3.7x	2.6x	2.2x	NEG	NEG	>50	NEG	NEG	NEG
Sage Group plc	8,711	4.4x	4.0x	3.7x	19.1x	16.9x	15.4x	29.3x	25.2x	22.4x
Tyler Technologies, Inc.	14,956	8.1x	7.5x	6.8x	31.4x	29.9x	26.0x	44.1x	43.2x	37.1x
Roper Technologies, Inc.	51,736	9.6x	8.7x	8.2x	23.6x	21.1x	19.6x	30.3x	26.8x	25.0x
Enghouse Systems Limited	1,999	4.7x	4.62x	4.55x	14.5x	13.8x	13.72x	20.2x	28.3x	27.94x
Oracle Corporation	300,393	6.4x	5.8x	5.3x	12.8x	11.5x	10.3x	18.4x	17.0x	14.8x
SAP SE	138,711	4.1x	4.2x	3.9x	17.0x	15.0x	13.0x	26.8x	20.2x	17.5x
Enterprise Application Software Average		5.9x	5.3x	4.9x	20.3x	18.4x	16.5x	28.7x	27.3x	24.3x
Extended ERP										
Adobe Incorporated	172,588	9.7x	8.9x	7.9x	19.9x	18.3x	16.5x	27.5x	24.6x	21.5x
Open Text Corporation	11,688	3.3x	3.2x	3.1x	9.6x	8.6x	8.5x	10.9x	9.6x	9.4x
Manhattan Associates, Inc.	8,188	10.9x	10.1x	9.0x	41.6x	38.2x	33.0x	>50	>50	45.1x
Pegasystems Inc.	3,617	2.9x	2.6x	2.3x	>50	39.0x	19.2x	>50	>50	27.3x
Software AG	1,853	2.0x	1.8x	1.7x	9.4x	8.1x	6.9x	14.4x	12.8x	10.5x
Fiserv, Inc.	89,284	5.3x	5.0x	4.7x	12.3x	11.4x	10.5x	16.5x	14.7x	13.0x
Extended ERP Average		5.7x	5.3x	4.8x	18.6x	20.6x	15.8x	17.3x	15.4x	21.1x
Software As A Service										
Descartes Systems Group Inc.	6,085	12.5x	11.4x	10.3x	28.3x	25.6x	23.1x	>50	>50	>50
Kinaxis, Inc.*	3,083	8.3x	7.6x	6.3x	41.7x	41.2x	33.6x	>50	>50	>50
Docebo, Inc.*	1,061	7.4x	5.5x	4.2x	NEG	>50	>50	>50	>50	>50
Lightspeed Commerce Inc*	1,957	2.8x	2.2x	1.7x	NEG	NEG	45.6x	NEG	NEG	>50
Veeva Systems Inc Class A	24,564	11.6x	10.3x	8.9x	29.3x	26.7x	22.5x	41.7x	38.6x	33.1x
Shopify, Inc. Class A	50,472	9.2x	7.6x	6.1x	NEG	>50	>50	NEG	>50	>50
Q4 Inc*	37	0.7x	0.6x	0.6x	NEG	NEG	NEG	NEG	NEG	NEG
Ceridian HCM Holding, Inc.	12,279	9.9x	8.5x	7.3x	>50	41.3x	31.8x	>50	>50	>50
ServiceNow, Inc.	93,424	12.9x	10.5x	8.6x	40.9x	33.9x	26.8x	>50	>50	41.4x
Workday, Inc. Class A	45,951	7.5x	6.4x	5.4x	29.4x	24.2x	19.7x	>50	40.7x	32.7x
Software As A Service Average		8.3x	7.1x	6.0x	33.9x	32.1x	29.0x	41.7x	39.7x	35.7x
Infrastructure Vendors										
Microsoft Corporation	1,849,184	9.1x	8.4x	7.4x	18.5x	17.0x	14.7x	27.1x	25.0x	21.4x
Infrastructure Vendors Average		9.1x	8.4x	7.4x	18.5x	17.0x	14.7x	27.1x	25.0x	21.4x
Software Average		6.9x	6.1x	5.4x	23.5x	23.1x	20.4x	26.1x	25.5x	25.0x

*Share Price Converted to USD

Source: FactSet and CIBC World Markets Inc.

Exhibit 5: Business Services Stocks – Comp Table, 2021 - 2023E

Ticker	FactSet	Price 2/1/2023	Dividend Yield	FCF Yield	Shares Out	Market Cap	Net Debt (\$mlns.)	Enterprise Value (\$mlns.)	EV/EBIT				EV/EBITDA			P/E			EV/S		
									C21	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E	C22	C23E	C24E
Business & IT Services																					
CGI Inc. Class A	GIB.A	GIB.A-CA	118.93	0.00%	5.92%	238	28,330	2,500	30,830	12.5x	12.5x	11.0x	10.7x	19.0x	17.0x	16.2x	2.3x	2.2x	2.1x		
TELUS International (CDA), Inc.	TIXT	TIXT-US	23.87	0.00%	2.87%	266	6,351	843	7,194	13.3x	11.9x	10.5x	9.8x	20.2x	16.9x	15.7x	2.9x	2.6x	2.4x		
Accenture Plc Class A	CAN	ACN-US	283.16	1.35%	4.85%	658	186,429	(4,568)	181,861	18.9x	15.8x	14.9x	13.8x	25.8x	23.9x	21.6x	2.9x	2.8x	2.6x		
Booz Allen Hamilton	BAH	BAH-US	94.755	1.75%	5.14%	132	12,534	2,404	14,937	16.7x	15.0x	14.1x	13.0x	21.4x	19.7x	17.7x	1.7x	1.5x	1.4x		
CACI International Inc Class A	CACI	CACI-US	305.395	0.00%	10.30%	24	7,179	2,001	9,180	12.4x	13.7x	12.7x	11.9x	17.0x	16.1x	14.6x	1.4x	1.4x	1.3x		
DXC Technology Co.	DXC	DXC-US	28.58	0.00%	23.73%	230	6,575	3,496	10,071	5.0x	4.1x	4.1x	4.0x	8.2x	6.6x	5.8x	0.7x	0.7x	0.7x		
Genpact Limited	G	G-US	47.61	0.81%	6.98%	183	8,725	1,101	9,826	15.2x	12.7x	11.4x	10.3x	17.4x	15.9x	14.2x	2.3x	2.1x	1.9x		
International Business Machines	IBM	IBM-US	134.52	4.68%	6.99%	904	121,623	45,172	166,795	12.4x	10.8x	11.1x	10.7x	14.7x	14.2x	13.3x	2.8x	2.7x	2.6x		
Atos SE	ATO	ATO-FR	12.18	0.00%	6.29%	111	1,351	1,771	3,122	3.0x	3.1x	2.9x	2.6x	13.8x	6.4x	3.9x	0.3x	0.3x	0.3x		
Capgemini SE	CAP	CAP-FR	176.8	1.11%	7.12%	174	30,689	5,353	36,042	12.5x	10.2x	9.7x	8.8x	16.3x	15.3x	13.9x	1.6x	1.6x	1.5x		
Sopra Steria Group SA	SOP	SOP-Fr	155.2	2.03%	12.73%	21	3,189	1,246	4,435	8.4x	7.3x	6.7x	6.2x	11.3x	10.2x	9.3x	0.9x	0.8x	0.8x		
Converge Technology Solutions CCTS	CTS	CTS-CA	5.74	0.00%	6.95%	210	1,207	195	1,402	14.9x	10.1x	7.6x	6.8x	36.1x	28.7x	24.2x	0.6x	0.5x	0.4x		
Business & IT Services Average									11.8x	10.7x	9.9x	9.3x	16.8x	14.7x	13.3x	1.8x	1.7x	1.6x			
HR Outsourcing									EV/EBIT	EV/EBITDA			P/E			EV/S					
Ceridian HCM Holding, Inc.	CDAY	CDAY-US	74.92	0.00%	-0.13%	154	11,507	807	12,315	>50	>50	41.4x	31.9x	>50	>50	>50	10.0x	8.5x	7.3x		
Willis Towers Watson	WTW	WTW-US	253.245	1.27%	5.68%	108	27,411	769	28,180	12.6x	12.2x	11.3x	10.3x	18.9x	16.7x	14.4x	3.2x	3.1x	2.9x		
Aon Plc Class A	AO	AON-US	319.64	0.66%	2.83%	207	66,118	9,587	75,705	19.8x	18.8x	17.5x	16.4x	24.3x	21.8x	19.6x	6.1x	5.7x	5.5x		
Automatic Data Processing, Inc.	ADP	ADP-US	225.815	1.93%	3.08%	415	93,674	2,107	95,782	25.0x	20.8x	18.7x	17.1x	30.0x	26.7x	24.0x	5.6x	5.2x	4.9x		
Paychex, Inc.	PAYX	PAYX-US	117.62	2.24%	3.21%	360	42,398	(368)	42,030	25.4x	19.5x	18.1x	16.8x	29.1x	26.7x	24.9x	8.7x	8.2x	7.7x		
HR Outsourcing Average									20.7x	17.8x	21.4x	18.5x	25.6x	23.0x	20.7x	6.7x	6.1x	5.7x			
Information Services									EV/EBIT	EV/EBITDA			P/E			EV/S					
Broadridge Financial Solutions, Inc.	BR	BR-US	152.87	1.80%	2.29%	118	17,986	3,841	21,827	18.8x	16.6x	15.5x	14.8x	22.8x	21.2x	19.5x	3.7x	3.5x	3.3x		
Dye & Durham Ltd.	DND	DND-CA	21.21	0.34%	6.85%	66	1,408	932	2,340	14.7x	14.7x	12.1x	10.4x	0.1x	0.1x	0.1x	4.8x	4.8x	4.2x		
Deluxe Corporation	DLX	DLX-US	19.88	3.74%	11.94%	43	858	1,458	2,316	6.3x	5.6x	5.7x	5.2x	4.9x	5.0x	3.9x	1.0x	1.1x	1.0x		
Information Services Average									13.3x	12.3x	11.1x	10.1x	9.3x	8.8x	7.8x	3.2x	3.1x	2.8x			
Financial Services Technology									EV/EBIT	EV/EBITDA			P/E			EV/S					
Fidelity National Information Services	FIS	FIS-US	77	1.43%	9.39%	593	45,690	18,867	64,557	10.6x	10.4x	10.0x	9.3x	11.6x	11.7x	10.5x	4.5x	4.3x	4.1x		
Fiserv, Inc.	FISV	FISV-US	107.75	0.00%	4.13%	635	68,424	21,139	89,563	16.1x	12.4x	11.5x	10.5x	16.6x	14.8x	13.0x	5.3x	5.0x	4.7x		
Jack Henry & Associates, Inc.	JKHY	JKHY-US	181.19	1.06%	3.53%	73	13,218	176	13,394	19.2x	21.1x	19.3x	17.5x	36.8x	34.9x	31.5x	6.6x	6.2x	5.7x		
ACI Worldwide, Inc.	ACMW	ACW-US	28.065	0.00%	6.00%	112	3,154	1,011	4,165	11.3x	11.2x	10.5x	10.0x	20.7x	22.5x	20.0x	3.0x	2.9x	2.8x		
Temenos AG	TEMN	TEMN-SWX	64.86	0.79%	9.21%	75	4,860	821	5,681	10.4x	15.8x	14.9x	12.6x	23.3x	21.5x	18.0x	6.0x	5.6x	5.1x		
Global Payments Inc.	GPN	GPN-US	115.68	0.66%	6.73%	270	31,280	10,509	41,789	11.4x	10.7x	10.1x	9.2x	12.4x	11.2x	9.8x	5.2x	4.9x	4.6x		
Financial Services Technology Average									13.2x	13.6x	12.7x	11.5x	20.2x	19.4x	17.1x	5.1x	4.8x	4.5x			
Diversified Real Estate Services									EV/EBIT	EV/EBITDA			P/E			EV/S					
Colliers International Group Inc.	CIGI	CIGI-US	107.85	0.14%	3.81%	43	4,629	849	5,478	10.0x	8.7x	8.2x	7.7x	15.3x	15.1x	14.0x	1.2x	1.2x	1.1x		
CBRE Group, Inc. Class A	CBRE	CBRE-US	85.03	0.00%	8.08%	316	26,865	1,769	28,634	13.4x	10.1x	10.7x	9.4x	15.4x	16.3x	13.9x	0.9x	0.9x	0.8x		
Jones Lang LaSalle Incorporated	JLL	JLL-US	178.7	0.00%	9.36%	47	8,482	1,873	10,355	7.1x	8.2x	8.8x	7.8x	11.5x	12.1x	10.2x	0.5x	0.5x	0.5x		
Diversified Real Estate Services Average									10.2x	9.0x	9.2x	8.3x	14.1x	14.5x	12.7x	0.9x	0.9x	0.8x			
Software Focused IT Solutions/VARs									EV/EBIT	EV/EBITDA			P/E			EV/S**					
Softchoice Corporation* USD	SFTC	SFTC-CA	13.14	1.19%	6.40%	59	770	86	856	35.1x	10.5x	9.2x	8.3x	21.0x	16.0x	15.1x	2.7x	2.5x	2.3x		
Softcat Plc*	SCT	SCT-GB	12.21	1.71%	3.36%	199	2,435	(91)	2,345	13.9x	14.0x	12.9x	11.8x	18.8x	18.0x	16.9x	5.9x	5.2x	4.7x		
Crayon Group Holding ASA*	CRAYN	CRAYN-OSL	98.4	0.00%	-1.17%	89	8,797	1,094	9,891	>50	>50	>50	>50	>50	>50	>50	23.2x	19.9x	17.3x		
Bytes Technology Group Plc*	BYT	BYT-GB	3.902	1.35%	5.38%	239	934	(66)	869	17.9x	13.2x	11.6x	10.4x	18.1x	17.0x	15.2x	NA	NA	NA		
SoftwareONE Holding Ltd.*	BYT	SWON-CH	14.77	1.67%	6.26%	159	2,342	(520)	1,822	11.0x	6.8x	6.2x	5.5x	16.2x	14.4x	12.1x	1.7x	1.5x	1.4x		
Bytes Technology Group Plc* Average									19.5x	11.1x	10.0x	9.0x	18.5x	16.3x	14.8x	8.4x	7.3x	6.4x			
Business Services Average									14.2x	12.2x	12.3x	11.1x	17.8x	16.3x	14.6x	4.0x	3.7x	3.4x			

*Share Price Converted to USD

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

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

Exhibit 6: SaaS Stocks – Comp Table, 2021 - 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 C23E C24E		
Tier 1 SaaS (Rule of 40 > 60)											
Zoom Video Communications	11%	28%	4%	27%	39%	30%	16,600	6.3x	3.8x	3.6x	3.4x
CrowdStrike Holdings, Inc.	58%	30%	36%	29%	88%	65%	23,601	27.0x	10.9x	8.1x	6.3x
Shopify, Inc.	25%	-4%	21%	-10%	21%	11%	46,735	10.1x	8.5x	7.1x	5.6x
Zscaler, Inc.	60%	23%	34%	21%	82%	55%	17,220	25.6x	13.5x	10.1x	7.9x
Lightspeed Commerce Inc*	72%	-18%	25%	-4%	53%	21%	1,818	8.2x	2.6x	2.1x	1.6x
DocuSign, Inc.	25%	18%	8%	18%	42%	26%	12,272	8.4x	5.0x	4.6x	4.2x
Veeva Systems Inc	18%	38%	13%	36%	56%	48%	24,231	16.5x	11.4x	10.2x	8.7x
Atlassian Corp. Plc	34%	26%	22%	21%	59%	43%	41,153	19.7x	13.1x	10.6x	8.3x
Twilio, Inc.	43%	-7%	17%	-3%	36%	14%	6,958	2.4x	1.8x	1.6x	1.3x
ServiceNow, Inc.	25%	27%	21%	30%	53%	50%	90,338	15.3x	12.5x	10.2x	8.4x
HubSpot, Inc.	38%	16%	19%	11%	53%	31%	16,371	12.6x	9.6x	8.0x	6.5x
Tier 1 SaaS (Rule of 40 > 60) Average								13.8x	8.4x	6.9x	5.7x
	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 C23E C24E		
Tier 2 SaaS (Rule of 40 b/w 40-60)											
Docebo, Inc.*	46%	0%	29%	-4%	46%	25%	1,045	10.0x	7.3x	5.5x	4.1x
Qualys, Inc.	18%	38%	17%	35%	56%	52%	4,026	9.8x	8.2x	7.1x	6.3x
Descartes Systems	17%	37%	8%	38%	54%	46%	5,964	14.0x	12.3x	11.2x	10.1x
Five9, Inc.	32%	1%	16%	7%	33%	22%	5,910	9.7x	7.6x	6.6x	5.5x
Dropbox, Inc.	9%	34%	6%	34%	43%	39%	9,077	4.2x	3.9x	3.7x	3.5x
Wix.com Ltd.	12%	-1%	8%	4%	10%	12%	4,821	3.8x	3.5x	3.2x	2.8x
Workday, Inc.	21%	21%	17%	21%	42%	38%	45,080	10.5x	7.4x	6.3x	5.3x
VMware, Inc.	4%	25%	5%	30%	30%	35%	62,217	5.3x	4.7x	4.4x	4.1x
Tier 2 SaaS (Rule of 40 b/w 40-60) Average								8.4x	6.9x	6.0x	5.2x
	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 C23E C24E		
Tier 3 SaaS (Rule of 40 b/w 28-40)											
BlackLine, Inc.	23%	9%	18%	4%	32%	22%	4,227	9.9x	8.1x	6.9x	5.8x
MongoDB, Inc.	53%	-1%	26%	3%	51%	28%	14,253	24.1x	11.6x	9.1x	7.2x
LivePerson, Inc.	15%	-30%	4%	-4%	-15%	0%	1,034	2.2x	2.0x	1.9x	1.7x
Rapid7 Inc.	31%	4%	17%	10%	35%	27%	3,051	5.7x	4.5x	3.8x	3.3x
Paylocity Holding Corp.	36%	17%	28%	16%	53%	44%	11,534	18.1x	11.7x	9.2x	7.7x
Q2 Holdings, Inc.	16%	3%	13%	1%	19%	15%	2,073	4.2x	3.6x	3.2x	2.8x
Akamai Technologies, Inc.	6%	24%	3%	22%	30%	25%	15,767	4.6x	4.4x	4.2x	3.9x
Tier 3 SaaS (Rule of 40 b/w 28-40) Average								9.8x	6.6x	5.5x	4.6x
	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 C23E C24E		
Tier 4 SaaS (Rule of 40 <28)											
RingCentral, Inc.	29%	7%	17%	10%	36%	28%	4,924	3.1x	2.5x	2.1x	1.8x
Teradata Corporation	-6%	20%	-1%	24%	14%	23%	3,531	1.8x	2.0x	2.0x	1.9x
Zuora, Inc.	14%	3%	9%	0%	17%	9%	902	3.0x	2.3x	2.1x	1.8x
New Relic, Inc.	19%	3%	15%	2%	22%	17%	3,902	5.8x	4.4x	3.8x	3.3x
Kinaxis, Inc.*	44%	3%	19%	10%	46%	29%	3,054	12.2x	8.3x	7.5x	6.3x
Yext, Inc.	5%	4%	3%	-1%	8%	2%	720	2.0x	1.8x	1.7x	1.6x
Splunk Inc.	31%	9%	17%	18%	40%	35%	17,370	7.8x	5.1x	4.4x	3.7x
Tier 4 SaaS (Rule of 40 <28) Average								5.1x	3.8x	3.4x	2.9x
SaaS Average								9.8x	6.7x	5.6x	4.7x

*Share Price Converted to USD

Source: FactSet and CIBC World Markets Inc.

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