



EQUITY RESEARCH

April 28, 2022

Industry Update

Q1/22 U.S. Earnings Recap – Bits & Bytes Weekly

Mixed Results With Outsized Market Reactions

Our Conclusion

Q1 earnings season has arrived, with some of the largest U.S. technology companies reporting this week. Results to date have been roughly in line, with the software companies we follow reporting sales that were in line with consensus, on average, while EBITDA missed estimates by 1%. In the business services sector, revenue was generally in line with consensus, but profitability metrics were below the Street at three of the four companies, with the group missing Street EBITDA by an average of 6% as the sector contends with wage inflation.

Similar to Q4, we have seen an outsized market reaction to earnings beats and misses, with Netflix down 35% given unexpected subscription declines and Meta up 12% given better-than-expected daily active users. On average, the software names we follow delivered -2% post earnings (+3% ex-Netflix), while the business services names were up an average of 0.75%.

Key Points

Meta (FB): Facebook reported revenue of US\$28.0 billion, 4% below consensus of US\$28.3 billion. EPS of US\$2.72 was above expectations of US\$2.55 and daily active users came in slightly above analyst expectations at 1.96 billion. The company has guided to Q2/22 revenue of US\$28 billion to US\$30 billion, below consensus of US\$30.6 billion.

Microsoft (MSFT): A strong quarter amid a challenging macro backdrop, where revenue of US\$49.4 billion and EPS of \$2.22 beat consensus by 1%, underpinned by accelerating demand for the company's cloud business and an increasing pace of large (over \$100 million) Azure deals. Intelligence Cloud division revenues of US\$19.1 billion were above consensus of US\$18.9 billion and, notably, LinkedIn revenue was up 34% Y/Y. Microsoft increased guidance given strong demand and continued momentum for all segments.

Netflix (NFLX): Netflix reported EPS of US\$3.53, beating consensus of US\$2.90, but the big surprise was the negative net subscriber additions for the first quarter in more than a decade, at -203k versus guidance of 2.5 million and consensus of 2.6 million. Netflix quoted intense competition and password-sharing as the biggest roadblocks leading to subscriber decline.

Google (GOOG): Revenue of US\$68.0 billion was up 23% Y/Y and in line with consensus, while EPS of US\$24.62 came in 4% below consensus and was down 6% Y/Y. Revenue growth was driven by search, advertising and cloud business while YouTube ad revenue grew by 14% Y/Y, with growth slowing significantly from 49% Y/Y during the same period in 2021.

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Sector:

Information Technology

Exhibit 1: Software & Services – Earnings Results Versus Consensus Expectations, CQ1/22

Software

	Calendar Q1/22			Y/Y Change				Consensus		Surprise (%)			
Company	Revenue (\$M)	EBITDA (\$M)	EPS (\$)	Revenues (%)	EBITDA (%)	EPS (%)	Revenues (\$	SM)	EBITDA (\$M)	EPS (\$)	Revenue	EBITDA	EPS
Microsoft	49,360	24,137	2.22	18%	21%	9%	49,023	1	24,226 ↓	2.19	1%	0%	1%
Google	68,011	28,380	24.62	23%	24%	-6%	68,113	\downarrow	27,459 ↑	25.62	. 0%	3%	-4%
Meta	27,980	10,680	2.72	7%	-20%	-18%	28,311	\downarrow	12,819 ↓	2.55	-1%	-17%	7%
Netflix	7,868	2,165	3.53	10%	-54%	-6%	7,929	\downarrow	1,925 ↑	2.9	-1%	12%	22%
PayPal	6,483	1,554	0.88	7%	16%	-28%	6,401	↑	1,482 ↑	0.88	1%	5%	0%
ServiceNow	1,722	538	1.73	27%	13%	14%	1,698	↑	543 ↓	1.7	1%	-1%	2%
SAP SE (€)	7,077	1,972	1.00	-7.4%	-4.3%	-5.7%	6,890	↑	2,197 ↓	1.16	3%	-10%	-14%
	-			12.1%	-0.8%	-5.7%			-		0.6%	-1.1%	2.0%

IT Services

	Calendar Q1/21			Y/Y Change			Consensus					Surprise (%)		
Company	Revenue (\$M)	EBITDA (\$M)	EPS (\$)	Revenues (%)	EBITDA (%)	EPS (%)	Revenues (\$M	۱)	EBITDA (\$M)	EPS (\$	5)	Revenue	EBITDA	EPS
CACI International	1,584	161	4.64	2%	-13%	-3%	1,655 ↓	↓	176 ↓	4.78	↓	-4%	-9%	-3%
IBM	14,197	2,729	1.40	-20%	-17%	32%	13,777 ↑	↑	2,925 ↓	1.39	↑	3%	-7%	1%
Infosys Limited (Rs)	326,066	78,500	13.71	24%	7%	15%	326,693 ↓	\downarrow	86,095 ↓	14.16	\downarrow	0%	-9%	-3%
Tata Consultancy Services (R:	505,900	138,500	26.9	16%	8%	8%	503,400 ↑	1	138,788 ↓	27.11	\downarrow	0%	0%	-1%
Average				5.5%	-3.7%	12.9%						-0.2%	-6.1%	-1.6%



News Impacting Our Coverage

Umanis And CGI Sign Agreement In Connection With The Previously Announced Acquisition

The acquisition which was announced in March will see CGI acquire 70.6% of the capital of Umanis at a price of €17.15 per share. CGI will acquire the rest of the shares through a tender offer, which is expected to be completed by Q4 2022. The acquisition agreement was signed on April 25, 2022, after positive opinions were issued by employee representatives bodies for both CGI France and Umanis.

CGI Enters Into Agreement For Acquisition Of Harwell Management

CGI announced that it has entered into an agreement through its subsidiary CGI France SAS, to acquire all of the shares of Harwell Management holding and their subsidiaries. Harwell Management is a management consulting firm that operates primarily within the French market and specializes in the financial services industry.

Enghouse Renews Normal Course Issuer Bid

Enghouse continues to have significant cash reserves and has renewed its NCIB where the company can purchase up to a maximum of 3,000,000 common shares, approximately 7% of the publicly listed float of 43,106,324 common shares. The bid will commence on May 2, 2022, and will terminate on May 1, 2023.

Constellations Volaris Group Acquires Sunrise Software

Sunrise is an expert in Service Management software and assists organisations with business process management by providing capabilities to build, track and report on workplace tasks, events, and activities, delivering greater productivity and satisfaction across the organisation.



Exhibit 2: CIBC Software/Services - Coverage Performance, 4/28/2021 - 4/28/2022

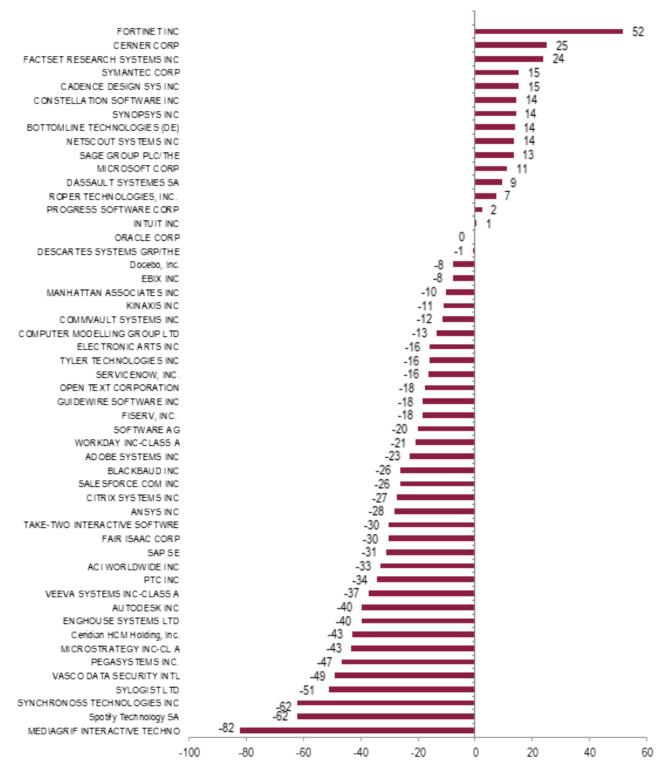
Software & Systems	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
Constellation Software Inc	2,100.00	(1.4)	(0.8)	0.6	(5.9)	14.4	(10.5)	2385.80	1677.44
Descartes Systems	62.29	(1.5)	(17.4)	(10.8)	(24.0)	(4.7)	(24.7)	91.39	56.78
Dye & Durham	21.04	(0.9)	(21.5)	(38.7)	(44.0)	NA	(53.1)	50.49	20.81
Enghouse Systems Limited	35.13	(3.4)	(11.9)	(18.3)	(34.2)	(39.7)	(27.5)	64.42	34.21
Open Text Corp	39.28	(7.6)	(8.3)	(16.2)	(22.0)	(17.7)	(17.3)	55.25	38.98
Kinaxis	142.00	(0.8)	(14.3)	(11.6)	(26.0)	(11.1)	(19.9)	229.98	130.88
Docebo, Inc.	55.87	(7.8)	(10.2)	(18.7)	(39.7)	(7.9)	(34.2)	117.55	49.11
Magnet Forensics	23.52	(5.8)	(14.3)	(2.5)	(39.9)	NA	(28.4)	65.80	20.92
Q4 Inc.	4.30	(4.4)	(12.2)	NA	NA	NA	NA	12.05	4.24
Average		(3.7)	(12.3)	(14.5)	(29.5)	(11.1)	(26.9)		

Business Services	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD	52W High	52W Low
CGI Group Inc	102.99	(0.8)	2.0	(2.5)	(7.1)	(3.7)	(7.9)	116.88	98.77
Converge Technologies	9.15	2.0	(6.5)	(3.3)	(22.5)	75.0	(15.8)	13.09	5.20
Softchoice Corporation	22.50	(5.9)	(15.3)	(5.5)	NA	NA	NA	45.74	18.63
Telus International	28.00	(1.9)	(9.3)	(18.7)	(40.7)	NA	NA	49.43	27.40
Average		(1.6)	(7.3)	(7.5)	(23.4)	35.6	(11.9)		

Indices	Price	1 Week	1 Month	3 Month	6 Month	1 Year	YTD
S&P/TSX Composite Index	20,744.23	(4.2)	(5.6)	0.0	(2.1)	7.2	(2.3)
S&P 500 Index	4,183.96	(4.8)	(8.6)	(5.6)	(9.0)	0.0	(12.2)
S&P/TSX Software Index	142.56	(4.4)	(16.2)	(19.8)	(37.9)	(27.3)	(32.8)
S&P500 Software Index	4,700.74	(1.2)	(10.4)	(10.7)	(19.8)	0.9	(19.6)



Exhibit 3: Software Stocks - Return Performance (%), 4/28/2021 - 4/28/2022





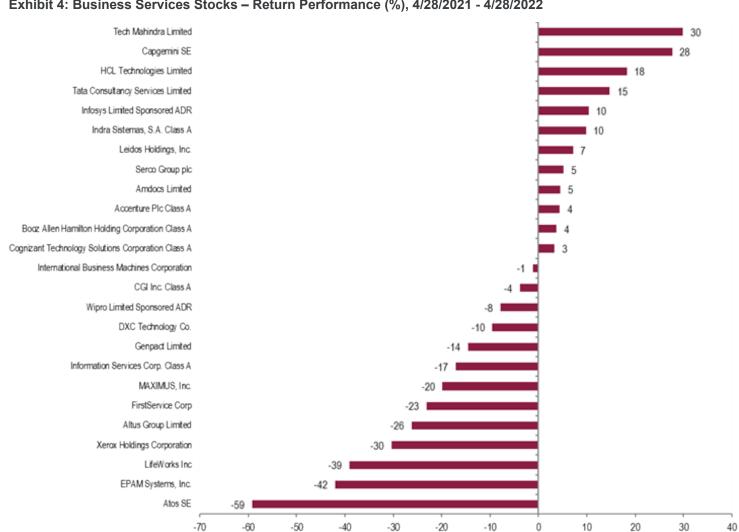


Exhibit 4: Business Services Stocks - Return Performance (%), 4/28/2021 - 4/28/2022



Exhibit 5: Software Stocks - Comp Table, 2021 - 2023E

	Enterprise			EV/EBITDA						
	Value	C21	C22E	C23E	C21	C22E	C23E	C21	C22E	C23E
Enterprise Application Software										
Constellation Software Inc.*	35,223	6.9x	6.9x	5.9x	23.3x	23.3x	20.1x	>50	>50	29.7x
BlackBerry Limited*	3,110	3.5x	4.5x	3.4x	>50	NEG	NEG	NEG	NEG	NEG
Sage Group plc	7,624	4.1x	3.9x	3.6x	18.4x	16.4x	14.9x	27.7x	27.1x	24.1x
Tyler Technologies, Inc.	16,377	10.3x	8.9x	8.1x	46.6x	34.2x	30.8x	>50	49.4x	44.9x
Roper Technologies, Inc.	57,931	10.0x	9.3x	8.8x	26.2x	24.2x	22.6x	46.1x	30.4x	28.3x
Enghouse Systems Limited	1,778	3.9x	3.9x	3.7x	10.9x	10.9x	10.7x	21.0x	21.0x	21.4x
Oracle Corporation	239,926	5.9x	5.5x	5.2x	12.8x	10.8x	10.2x	16.4x	14.9x	13.6x
SAP SE	121,944	4.4x	3.8x	3.8x	17.0x	13.6x	12.3x	21.6x	19.1x	16.7x
Enterprise Application Software Av	verage	6.1x	5.8x	5.3x	22.2x	19.1x	17.4x	26.6x	27.0x	25.5x
Extended ERP										
Adobe Incorporated	186,883	11.8x	10.3x	9.0x	28.0x	21.2x	18.4x	39.7x	28.7x	24.4x
Open Text Corporation	12,917	3.8x	3.8x	3.5x	10.1x	10.1x	9.7x	12.4x	12.4x	11.9x
Manhattan Associates, Inc.	7,939	12.0x	11.0x	9.9x	>50	43.3x	37.5x	>50	>50	>50
Pegasystems Inc.	5,928	4.9x	4.1x	3.4x	NEG	47.9x	30.0x	NEG	>50	49.0x
Software AG	1,884	2.3x	2.1x	1.9x	12.2x	9.4x	7.7x	26.0x	18.3x	14.8x
Fiserv, Inc.	86,619	5.3x	5.2x	4.9x	15.6x	12.2x	11.2x	>50	15.6x	13.6x
Extended ERP Average		6.7x	6.1x	5.4x	16.5x	24.0x	19.1x	26.0x	18.8x	22.7x
Software As A Service										
Descartes Systems Group Inc.	5,079	12.0x	12.0x	10.7x	27.4x	27.4x	24.9x	>50	>50	>50
Kinaxis, Inc.*	2,871	11.4x	11.4x	8.8x	>50	>50	48.7x	>50	>50	>50
Docebo, Inc.*	1,218	11.7x	11.7x	8.3x	NEG	NEG	NEG	NEG	NEG	NEG
Lightspeed Commerce Inc*	2,419	5.2x	3.5x	2.6x	NEG	NEG	NEG	NEG	NEG	NEG
Veeva Systems Inc Class A	25,479	17.4x	11.9x	10.2x	>50	30.2x	25.8x	>50	45.1x	39.0x
Shopify, Inc. Class A	45,826	9.9x	7.6x	5.7x	>50	>50	>50	18.2x	>50	>50
Q4 Inc*	45	0.8x	0.8x	0.6x	NEG	NEG	NEG	NA	NEG	NEG
Magnet Forensics, Inc.*	614	6.6x	6.6x	5.1x	41.6x	41.6x	31.6x	>50	>50	>50
Ceridian HCM Holding, Inc.	9,331	9.1x	7.7x	6.6x	>50	49.7x	38.7x	NEG	>50	>50
ServiceNow, Inc.	92,164	15.6x	12.4x	10.0x	>50	39.8x	31.5x	>50	>50	49.9x
Workday, Inc. Class A	50,339	11.7x	8.2x	6.9x	>50	32.9x	26.4x	NEG	>50	46.1x
Software As A Service Average		10.1x	8.5x	6.9x	34.5x	37.0x	32.5x	18.2x	45.1x	45.0x
Infrastructure Vendors										
Citrix Systems, Inc.	15,709	4.9x	4.7x	4.5x	22.3x	14.9x	14.2x	41.4x	18.9x	16.9x
Microsoft Corporation	2,075,207	12.3x	9.7x	8.6x	25.7x	19.3x	16.8x	35.2x	28.1x	24.1x
Infrastructure Vendors Average	_,;::;,_0:	8.6x	7.2x	6.5x	24.0x	17.1x	15.5x	38.3x	23.5x	20.5x
Software Average		8.1x	7.1x	6.1x	22.5x	25.4x	22.5x	27.8x	25.3x	27.5x
*Share Price Converted to USD										



Exhibit 6: Business Services Stocks - Comp Table, 2021 - 2023E

6: Business Services Stocks – Comp Table, 2021 - 2023E										
	Enterprise	-	V/EBITD	A		P/E			EV/S	
	Value (\$mlns.)	C21	C22E	C23E	C21	C22E	C23E	C21	C22E	C23E
Business & IT Services										
CGI Inc. Class A	26,957	10.9x	10.9x	10.4x	18.4x	18.4x	16.4x	2.2x	2.2x	2.1x
TELUS International (CDA), Inc.	6,768	NA	12.5x	10.9x	NA	21.6x	18.2x	3.1x	3.1x	2.6x
Accenture Plc Class A	187,318	19.5x	15.7x	14.4x	33.1x	27.0x	24.2x	3.7x	2.9x	2.7x
Booz Allen Hamilton	12,985	14.6x	13.6x	12.8x	19.4x	19.0x	17.2x	1.7x	1.5x	1.4x
CACI International Inc Class A	8,590	11.6x	12.3x	11.7x	15.2x	14.5x	13.4x	1.4x	1.3x	1.3x
DXC Technology Co.	11,053	5.5x	4.1x	4.0x	NEG	7.0x	5.9x	0.6x	0.7x	0.7x
Genpact Limited	8,644	13.4x	10.7x	9.4x	21.3x	15.5x	13.6x	2.1x	2.0x	1.8x
International Business Machines	169,044	12.6x	10.2x	9.9x	21.3x	13.9x	12.8x	2.9x	2.8x	2.7x
Atos SE	4,344	4.1x	4.0x 11.8x	3.5x	NEG	9.7x	6.7x	0.4x	0.4x	0.4x
Capgemini SE Sopra Steria Group SA	38,754 4,702	13.4x 8.9x	7.8x	10.8x 7.1x	29.1x 18.3x	19.6x 12.6x	17.4x 11.1x	2.1x 1.0x	1.9x 0.9x	1.8x 0.9x
Business & IT Services Average	4,702	11.4x	10.3x	9.5x	22.0x	16.2x	14.3x	1.0x	1.8x	1.7x
Busiliess & IT Services Average		11.48	10.5%	9.58	22.UX	10.28	14.51	1.38	1.0X	1.78
HR Outsourcing			V/EBITD	A		P/E			EV/S	
LifeWorks Inc	1,861	9.6x	9.6x	9.3x	NEG	NEG	28.7x	1.8x	1.8x	1.8x
Ceridian HCM Holding, Inc.	9,331	>50	49.7x	38.7x	NEG	>50	>50	9.1x	7.7x	6.6x
Willis Towers Watson	27,146	12.2x	11.1x	10.2x	7.1x	17.3x	14.8x	3.0x	2.9x	2.8x
Aon Plc Class A	76,171	19.9x	18.8x	17.5x	>50	23.5x	21.2x	6.2x	5.9x	5.6x
Automatic Data Processing, Inc.	96,631	25.2x	21.8x	19.8x	37.6x	31.2x	28.0x	6.4x	5.7x	5.3x
Paychex, Inc.	47,024	28.5x	22.3x	20.8x	43.1x	33.3x	30.9x	11.6x	9.9x	9.3x
HR Outsourcing Average		19.1x	22.2x	19.4x	29.3x	26.3x	24.7x	6.4x	5.7x	5.2x
Information Services		I	V/EBITD	A		P/E			EV/S	
Broadridge Financial Solutions, Inc.	21,060	18.1x	16.1x	15.2x	31.6x	21.9x	20.3x	4.1x	3.6x	3.5x
Dye & Durham Ltd.	1,624	10.2x	10.2x	7.7x	>50	>50	33.7x	4.3x	4.3x	2.8x
Deluxe Corporation	2,592	7.0x	5.9x	5.6x	18.2x	5.6x	5.1x	1.3x	1.2x	1.2x
Information Services Corp	381	5.6x	5.6x	6.7x	10.3x	10.3x	12.9x	2.2x	2.2x	2.2x
Information Services Average		10.2x	9.5x	8.8x	20.0x	12.6x	18.0x	3.0x	2.8x	2.4x
Financial Services Technology			EV/EBITD	Δ		P/E			EV/S	
Fidelity National Information Services	79,232	13.0x	11.9x	10.9x	>50	13.6x	12.0x	5.7x	5.3x	5.0x
Fisery, Inc.	86,619	15.6x	12.2x	11.2x	>50	15.6x	13.6x	5.7x	5.2x	4.9x
Jack Henry & Associates, Inc.	14,080	20.2x	22.0x	20.0x	46.6x	38.3x	35.2x	8.0x	7.0x	6.6x
ACI Worldwide, Inc.	4,106	11.2x	10.1x	9.4x	25.0x	20.6x	17.8x	3.0x	2.9x	2.7x
Temenos AG	8,019	14.6x	16.8x	14.8x	40.2x	23.4x	20.4x	8.3x	7.6x	6.9x
Global Payments Inc.	48,868	13.4x	12.2x	11.0x	41.4x	14.3x	12.2x	5.7x	5.8x	5.3x
Financial Services Technology Av	erage	14.7x	14.2x	12.9x	38.3x	21.0x	18.5x	6.0x	5.6x	5.2x
Diversified Real Estate Services			EV/EBITD			P/E			EV/S	
Colliers International Group Inc.	5,835	10.7x	9.5x	8.6x	-12.4x	16.1x	14.8x	1.4x	1.3x	1.2x
Altus Group Limited	2,191	21.2x	20.7x	17.4x	31.1x	31.1x	32.8x	3.5x	3.5x	3.1x
CBRE Group, Inc. Class A	29,191	13.7x	8.9x	8.2x	15.3x	13.8x	12.3x	1.1x	0.9x	0.8x
Jones Lang LaSalle Incorporated	12,740	8.7x	8.6x	8.1x	11.9x	11.3x	10.3x	0.7x	1.1x	1.0x
Diversified Real Estate Services A	verage	13.6x	11.9x	10.6x	11.5x	18.1x	17.5x	1.7x	1.7x	1.5x
Software Focused IT Solutions/VA	Rs		EV/EBITD	Α		P/E			EV/S	
Softchoice Corporation*	1,425	20.6x	20.6x	14.2x	34.8x	34.8x	30.3x	5.0x	5.0x	4.4x
Softcat Pic*	2,773	16.5x	16.0x	15.0x	21.8x	21.9x	21.3x	7.4x	6.9x	6.3x
Crayon Group Holding ASA*	13,288	>50	>50	>50	>50	>50	>50	>50	30.1x	25.4x
Bytes Technology Group Plc*	1,074	22.1x	17.7x	16.5x	24.5x	23.1x	22.0x	NA	NA	NA
SoftwareONE Holding Ltd.*	1,534	9.3x	6.1x	5.3x	16.8x	15.0x	12.6x	7.3x	1.5x	1.4x
Bytes Technology Group Pic* Ave	rage	17.1x	15.1x	12.7x	24.5x	23.7x	21.6x	6.6x	10.9x	9.4x

13.7x

14.0x

12.2x 23.9x

19.2x

18.2x 3.9x

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

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

Business Services Average



3.8x

Exhibit 7: SaaS Stocks - Comp Table, 2021 - 2023E

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise		EV/S	
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21	C22E	C23E
Tier 1 SaaS (Rule of 40 > 60)										
Zoom Video Communications	55%	36%	11%	32%	91%	43%	23,877	9.0x	5.3x	5.3x
CrowdStrike Holdings, Inc.	66%	31%	48%	29%	97%	78%	45,176	51.7x	21.6x	21.6x
Shopify, Inc.	57%	10%	31%	5%	67%	36%	45,826	9.9x	7.6x	7.6x
Zscaler, Inc.	60%	26%	43%	23%	86%	65%	28,351	42.1x	23.5x	23.5x
Lightspeed POS, Inc.	159%	-22%	40%	-12%	137%	28%	2,419	10.9x	3.5x	3.5x
DocuSign, Inc.	45%	23%	17%	19%	68%	37%	16,528	11.4x	6.8x	6.8x
Veeva Systems Inc	26%	38%	17%	36%	64%	53%	25,479	17.4x	11.9x	11.9x
Atlassian Corp. Plc	35%	35%	21%	25%	70%	46%	61,138	29.3x	20.0x	20.0x
Twilio, Inc.	61%	-3%	36%	-2%	58%	34%	17,416	6.1x	4.5x	4.5x
ServiceNow, Inc.	30%	31%	26%	31%	61%	57%	92,164	15.6x	12.4x	12.4x
HubSpot, Inc.	47%	18%	33%	14%	66%	46%	17,069	13.1x	9.9x	9.9x
Tier 1 SaaS (Rule of 40 > 60) Average							19.7x	11.5x	11.5x

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise		EV/S	
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21E	C22E	C22E
Tier 2 SaaS (Rule of 40 b)	/w 40-60)									
Docebo, Inc.	55%	-4%	42%	-4%	51%	38%	1,218	11.7x	11.7x	8.3x
Qualys, Inc.	14%	43%	17%	34%	56%	51%	5,030	12.2x	10.4x	10.4x
Descartes Systems	22%	40%	12%	37%	62%	50%	5,079	12.0x	12.0x	10.7x
Avalara Inc	40%	6%	23%	0%	45%	23%	6,231	8.9x	7.3x	7.3x
Five9, Inc.	40%	-2%	24%	5%	38%	29%	7,370	12.1x	9.7x	9.7x
Dropbox, Inc.	13%	34%	8%	33%	47%	41%	8,906	4.1x	3.8x	3.8x
Mimecast Limited	19%	28%	15%	23%	48%	38%	5,289	10.5x	7.9x	7.9x
Wix.com Ltd.	28%	5%	15%	2%	33%	16%	4,047	3.2x	2.8x	2.8x
Workday, Inc.	20%	27%	20%	19%	47%	40%	50,339	11.7x	8.2x	8.2x
VMware, Inc.	9%	31%	7%	28%	40%	35%	55,564	4.7x	4.1x	4.1x
Tier 2 SaaS (Rule of 40 b)	/w 40-60) Average							9.1x	7.8x	7.3x

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise		EV/S	
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21E	C22E	C22E
Tier 3 SaaS (Rule of 40 b/w	28-40)									
BlackLine, Inc.	21%	18%	23%	2%	39%	25%	3,809	8.9x	7.3x	7.3x
Zendesk, Inc.	30%	12%	26%	10%	42%	37%	15,187	11.3x	9.0x	9.0x
MongoDB, Inc.	48%	1%	35%	0%	49%	35%	23,734	40.2x	20.5x	20.5x
LivePerson, Inc.	28%	-8%	18%	-12%	20%	6%	1,596	3.4x	2.9x	2.9x
Rapid7 Inc.	30%	8%	28%	7%	39%	35%	6,408	12.0x	9.3x	9.3x
Paylocity Holding Corp.	25%	16%	25%	15%	41%	40%	10,294	16.2x	11.1x	11.1x
Q2 Holdings, Inc.	24%	2%	16%	2%	26%	18%	3,144	6.3x	5.4x	5.4x
Akamai Technologies, Inc.	8%	25%	8%	24%	33%	33%	20,075	5.8x	5.4x	5.4x
Tier 3 SaaS (Rule of 40 b/w	28-40) Average							13.0x	8.9x	8.9x

	LTM Revenue	LTM FCF	NTM Revenue	NTM FCF	LTM Rule	NTM Rule	Enterprise		EV/S	
	Growth	Margin	Growth	Margin	Of 40	Of 40	Value (\$MM)	C21E	C22E	C22E
Tier 4 SaaS (Rule of 40 <28)										
RingCentral, Inc.	35%	6%	26%	7%	41%	33%	9,098	5.7x	4.5x	4.5x
Teradata Corporation	4%	23%	1%	21%	27%	22%	4,375	2.3x	2.3x	2.3x
Anaplan, Inc.	32%	-5%	26%	0%	27%	26%	9,504	21.2x	13.0x	13.0x
Zuora, Inc.	14%	7%	16%	0%	20%	16%	1,388	4.5x	3.5x	3.5x
New Relic, Inc.	15%	-4%	17%	4%	11%	22%	3,852	5.8x	4.4x	4.4x
Kinaxis, Inc.	4%	7%	36%	9%	11%	45%	2,871	11.4x	11.4x	8.8x
Yext, Inc.	10%	4%	4%	-1%	14%	3%	624	1.8x	1.5x	1.5x
Splunk Inc.	20%	4%	23%	12%	24%	35%	21,423	9.6x	6.6x	6.6x
Tier 4 SaaS (Rule of 40 <28)	Average							7.8x	5.9x	5.6x

SaaS Average 12.8x 8.7x 8.5x



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