



EQUITY RESEARCH

May 12, 2022 Industry Update

Hiring Consultants – Bits & Bytes Weekly

The Great Hiring Spree Of Business Services Companies

Our Conclusion

The total number of U.S. jobs hasn't yet climbed back to pre-pandemic levels, but that has not stopped Business and Professional Services companies from stockpiling talent as demand for their services skyrockets. There might be a great resignation, but the hiring spree has been greater for this sector, allowing these companies to recover any ground lost in the pandemic, and then some.

Key Points

The Great Resignation and labour shortages are all words we have been hearing more today than ever, but some sectors have made significant net additions to their workforce in the tightest labor market in history. Accenture hired a total of 200,000 people in the last 18 months, while Telus International (TI) increased its member count to 67,932 as of March 31, 2022, an increase of 32% Y/Y. Headcount for CGI also increased Y/Y by ~10% for a total of 84,000 consultants and professionals across the globe.

The pandemic accelerated the move to digitalization with a forced, almost overnight shift, leading to increased demands for business services professionals. This includes demand from clients to implement digital transformation initiatives/help using digital collaboration tools, shifting their infrastructure to the cloud, and training their staff. Recently TI, CGI and Accenture all reported earnings with strong top-line beats, but with margins coming in a touch lower than expected for Accenture and CGI as companies increase hiring while combating wage inflation.

To keep up with the hiring in the most innovative manner, companies like Accenture and TI are using cutting edge technologies to attract and introduce new hires to their companies. This year Accenture is expected to onboard about 150,000 people by going through Accenture's metaverse, using the beta version of Mesh by Microsoft. TI also recently announced the launch of its Metaverse recruiting by conducting metaverse interviews, focused on understanding candidates' cultural fit, personality and creativity.

Upskilling has also been a key area of focus for Business services companies as the pandemic especially drove demand for deep technology and security skills. In the first six months after the pandemic, Accenture upskilled about 100,000 people with programs that ranged from 8 to 15 weeks, so that the company could shift people towards the new places of demand. CGI also plans to increase its investment in training by 33% this year, with a focus on acceleration programs for consulting and technology skills.

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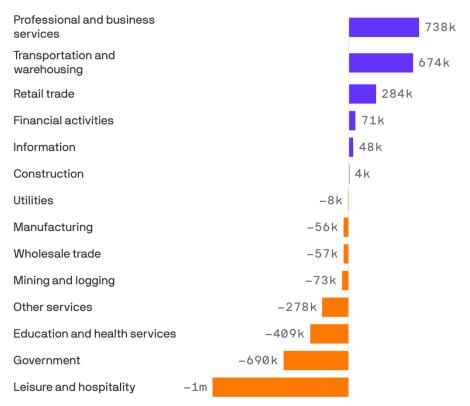
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Sector:

Information Technology

Exhibit 1: U.S. Employment, Changes By Sector – February 2020 To May 2022



Source: U.S. Bureau of Labor Statistics; Chart: Jared Whalen/Axios



News Impacting Our Coverage

Converge Completes Acquisition Of Interdynamix

Converge Technology Solutions Corp. announced the closing of its previously signed acquisition of IDX Systems Corp. Based out of Edmonton, InterDynamix Systems Corp provides information technology and software development services and will allow Converge to expand its footprint in Alberta.

Converge Announces Converge Enterprise Cloud for IBM Guardium Insight (CECIGI)

CECIGI is a cloud-agnostic, hosted, and managed solution for data security and compliance. It provides flexibility and scalability of Guardium Insights to provide advanced analytics, identifying potential data risk with much lower barriers to entry. This new offering is now available in the IBM product catalog.

Constellation Completes Acquisition Of Allscripts Healthcare Solutions

Constellations subsidiary Harris completed the purchase from Allscripts Healthcare Solutions ("Allscripts") of Allscripts' Hospitals and Large Physician Practices business segment.

Magnet Forensics Inc. Acquired Comae Technologies

Founded in 2016 by Suiche, Comae Technologies is located in United Arab Emirates and operates as a cybersecurity company that specializes in cloud-based memory analysis used to recover evidence from the volatile memory of devices. Magnet did not disclose the transaction price.

Management Changes At Docebo

Docebo announced that Nina Simosko and Nicole Williams have joined the company as Chief Sales Officer and Senior VP Revenue Strategy & Operations, respectively. Before Docebo, Simosko served as Chief Commercial Officer at enterprise software company Akerna Corp and held the positions of CEO and Chief Product Officer at global innovation company NTT Innovation Institute. Before that, she led the creation and execution of technology strategy, planning, and operations worldwide at Nike. Nicole recently led the Global Field Strategy and Enablement team at Cornerstone, where she served as the functional lead for the \$1.3B Saba acquisition, and will lead the revenue strategy function at Docebo.

Kinaxis And Wahupa Partner To Help Companies Navigate Inventory Complexity Through Disruptions

The partnership will utilize Wahupa's probabilistic multi-echelon inventory optimization (MEIO) with the Kinaxis RapidResponse® platform to help companies maximize service levels and lower costs.



Exhibit 2: CIBC Software/Services – Coverage Performance, 5/12/2021 - 5/12/2022

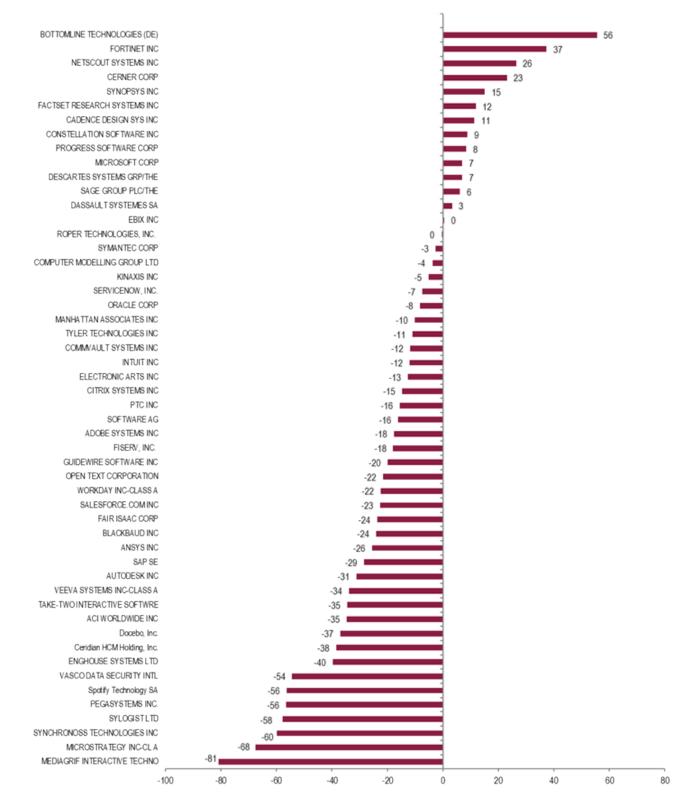
| Software & Systems | Price | 1 Week | 1 Month | 3 Month | 6 Month | 1 Year | YTD | 52W High | 52W Low |
|----------------------------|----------|--------|---------|---------|---------|--------|--------|----------|---------|
| Constellation Software Inc | 1,918.88 | (3.4) | (11.9) | (9.9) | (12.5) | 8.8 | (18.2) | 2385.80 | 1677.44 |
| Descartes Systems | 57.22 | (10.1) | (10.5) | (20.1) | (34.9) | (0.2) | (30.8) | 91.39 | 56.19 |
| Dye & Durham | 13.90 | (36.1) | (35.1) | (50.9) | (67.5) | NA | (69.0) | 50.49 | 12.95 |
| Enghouse Systems Limited | 31.93 | (11.9) | (18.8) | (23.1) | (42.8) | (39.8) | (34.1) | 64.42 | 31.46 |
| Open Text Corp | 35.79 | (12.2) | (15.3) | (19.1) | (30.4) | (21.5) | (24.6) | 55.25 | 35.33 |
| Kinaxis | 131.10 | (7.2) | (12.8) | (17.8) | (38.0) | (5.1) | (26.1) | 229.98 | 127.24 |
| Docebo, Inc. | 38.22 | (26.2) | (38.4) | (45.2) | (58.1) | (36.9) | (55.0) | 117.55 | 37.57 |
| Magnet Forensics | 18.18 | (22.5) | (32.3) | (33.3) | (49.5) | NA | (44.7) | 65.80 | 17.94 |
| Q4 Inc. | 4.45 | 1.4 | (6.3) | NA | NA | NA | NA | 12.05 | 4.03 |
| Average | | (14.2) | (20.2) | (27.4) | (41.7) | (15.8) | (37.8) | | |

| Business Services | Price | 1 Week | 1 Month | 3 Month | 6 Month | 1 Year | YTD | 52W High | 52W Low |
|------------------------|--------|--------|---------|---------|---------|--------|--------|----------|---------|
| CGI Group Inc | 102.15 | 0.3 | 0.3 | (4.5) | (8.6) | (3.9) | (8.7) | 116.88 | 98.77 |
| Converge Technologies | 6.19 | (20.3) | (28.9) | (42.6) | (44.1) | (16.7) | (43.1) | 13.09 | 5.88 |
| Softchoice Corporation | 19.72 | (12.4) | (22.2) | (13.2) | NA | NA | NA | 45.74 | 18.63 |
| Telus International | 28.80 | 6.7 | (4.5) | (13.9) | (35.8) | NA | NA | 49.43 | 26.75 |
| Average | | (6.4) | (13.9) | (18.5) | (29.5) | (10.3) | (25.9) | | |

| Indices | Price | 1 Week | 1 Month | 3 Month | 6 Month | 1 Year | YTD |
|-------------------------|-----------|--------|---------|---------|---------|--------|--------|
| S&P/TSX Composite Index | 19,699.31 | (4.8) | (9.3) | (8.6) | (9.5) | 3.1 | (7.2) |
| S&P 500 Index | 3,919.78 | (5.5) | (10.9) | (11.3) | (16.3) | (3.5) | (17.8) |
| S&P/TSX Software Index | 129.97 | (5.8) | (18.5) | (26.7) | (44.7) | (26.8) | (38.8) |
| S&P500 Software Index | 4,284.98 | (7.4) | (11.0) | (15.7) | (29.0) | (1.0) | (26.7) |



Exhibit 3: Software Stocks - Return Performance (%), 5/12/2021 - 5/12/2022





Tech Mahindra Limited Capgemini SE HCL Technologies Limited 17 Indra Sistemas, S.A. Class A Amdocs Limited Tata Consultancy Services Limited Infosys Limited Sponsored ADR Serco Group plc Cognizant Technology Solutions Corporation Class A Accenture Plc Class A Leidos Holdings, Inc. Booz Allen Hamilton Holding Corporation Class A International Business Machines Corporation Genpact Limited CGI Inc. Class A Wipro Limited Sponsored ADR DXC Technology Co. FirstService Corp Altus Group Limited Information Services Corp. Class A MAXIMUS, Inc. Xerox Holdings Corporation -27 I EPAM Systems, Inc. -32 LifeWorks Inc Atos SE -58

-30

-20

-10

10

20

40

Exhibit 4: Business Services Stocks - Return Performance (%), 5/12/2021 - 5/12/2022

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

-70

-50



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

| | Enterprise | | EV/S | | l F | V/EBITD | Δ | | P/E | |
|--|------------|--------------|-------|------|-------|----------|----------------|-------|-------|-------|
| | Value | C21 | C22E | C23E | C21 | C22E | C23E | C21 | C22E | C23E |
| Enterprise Application Software | Value | OZ I | UZZL | UZJL | OZ I | UZZL | UZJL | OZI | OZZL | UZJL |
| Constellation Software Inc.* | 32,047 | 6.3x | 6.3x | 5.0x | 21.2x | 21.2x | 18.5x | 47.7x | 47.7x | 26.6x |
| BlackBerry Limited* | 2,895 | 3.2x | 4.2x | 3.1x | >50 | NEG | NEG | NEG | NEG | NEG |
| Sage Group plc | 7,022 | 3.8x | 3.6x | 3.3x | 17.0x | 15.2x | 13.8x | 25.4x | 25.1x | 22.4x |
| Tyler Technologies, Inc. | 15,341 | 9.6x | 8.3x | 7.5x | 43.6x | 31.8x | 28.9x | >50 | 45.4x | 41.8x |
| Roper Technologies, Inc. | 53,125 | 9.0x 9.2x | 8.5x | 8.1x | 24.0x | 22.2x | 20.3x 20.7x | 41.6x | 27.3x | 25.4x |
| Enghouse Systems Limited | 1,601 | 3.5x | 3.5x | 3.3x | 9.8x | 9.8x | 9.6x | 19.1x | 19.1x | 19.4x |
| Oracle Corporation | 228,106 | 5.6x | 5.2x | 5.0x | 12.2x | 10.2x | 9.7x | 15.5x | 14.0x | 12.8x |
| SAP SE | 118,234 | 4.2x | 3.7x | 3.7x | 16.5x | 13.2x | 11.9x | 21.0x | 18.6x | 16.3x |
| Enterprise Application Software Av | , | 5.7x | 5.4x | 4.9x | 20.6x | 17.7x | 16.2x | 28.4x | 28.2x | 23.5x |
| Zinto: prioc / application Continue / to | olugo | Oli X | OI IX | HOX | Lolox | 1111X | IOIEA | Zorix | ZOIZA | TOTOX |
| Extended ERP | | | | | | | | | | |
| Adobe Incorporated | 182,626 | 11.6x | 10.1x | 8.8x | 27.3x | 20.7x | 18.0x | 38.8x | 28.1x | 23.9x |
| Open Text Corporation | 11,939 | 3.5x | 3.5x | 3.3x | 9.3x | 9.3x | 9.4x | 11.3x | 11.3x | 11.2x |
| Manhattan Associates, Inc. | 7,079 | 10.7x | 9.8x | 8.8x | 49.8x | 38.6x | 33.4x | >50 | >50 | 46.0x |
| Pegasystems Inc. | 4,471 | 3.7x | 3.1x | 2.6x | NEG | 40.9x | 24.8x | NEG | >50 | 37.2x |
| Software AG | 1,808 | 2.2x | 1.9x | 1.8x | 11.7x | 9.3x | 7.5x | 25.1x | 18.3x | 14.5x |
| Fiserv, Inc. | 81,073 | 5.0x | 4.9x | 4.6x | 14.6x | 11.4x | 10.5x | 46.7x | 14.4x | 12.5x |
| Extended ERP Average | · | 6.1x | 5.6x | 5.0x | 22.5x | 21.7x | 17.3x | 30.5x | 18.0x | 24.2x |
| | | | | | | | | | | |
| Software As A Service | | | | | | | | | | |
| Descartes Systems Group Inc. | 4,649 | 10.9x | 10.9x | 9.8x | 25.1x | 25.1x | 22.8x | >50 | >50 | >50 |
| Kinaxis, Inc.* | 2,617 | 10.4x | 10.4x | 7.5x | >50 | >50 | 41.0x | >50 | >50 | >50 |
| Docebo, Inc.* | 756 | 7.3x | 7.3x | 5.2x | NEG | NEG | NEG | NEG | NEG | NEG |
| Lightspeed Commerce Inc* | 1,697 | 3.7x | 2.5x | 1.8x | NEG | NEG | NEG | NEG | NEG | NEG |
| Veeva Systems Inc Class A | 22,920 | 15.6x | 10.7x | 9.2x | >50 | 27.2x | 23.2x | >50 | 41.0x | 35.4x |
| Shopify, Inc. Class A | 38,486 | 8.3x | 6.6x | 5.0x | >50 | >50 | >50 | 15.6x | >50 | >50 |
| Q4 Inc* | 48 | 0.9x | 0.9x | 0.7x | NEG | NEG | NEG | NA | NEG | NEG |
| Magnet Forensics, Inc.* | 444 | 4.8x | 4.8x | 3.7x | 30.3x | 30.3x | 21.6x | >50 | >50 | >50 |
| Ceridian HCM Holding, Inc. | 8,694 | 8.5x | 7.1x | 6.1x | >50 | 43.8x | 34.8x | NEG | >50 | >50 |
| ServiceNow, Inc. | 84,998 | 14.4x | 11.4x | 9.2x | >50 | 36.8x | 28.8x | >50 | >50 | 45.9x |
| Workday, Inc. Class A | 42,088 | 9.8x | 6.9x | 5.7x | >50 | 27.5x | 22.0x | NEG | 47.9x | 38.7x |
| Software As A Service Average | | 8.6x | 7.2x | 5.8x | 27.7x | 31.8x | 27.7x | 15.6x | 44.4x | 40.0x |
| Information Mandage | | | | | | <u> </u> | | | | |
| Infrastructure Vendors | 45.65 | 4.0 | 4 = | | 00.0 | 45.0 | 440 | 40.0 | 40.0 | 40.5 |
| Citrix Systems, Inc. | 15,621 | 4.9x | 4.7x | 4.4x | 22.2x | 15.9x | 14.9x | 40.9x | 18.6x | 16.5x |
| Microsoft Corporation | 1,864,258 | 11.1x | 8.7x | 7.7x | 23.1x | 17.3x | 15.1x | 31.7x | 25.4x | 21.8x |
| Infrastructure Vendors Average | | 8.0x | 6.7x | 6.0x | 22.6x | 16.6x | 15.0x | 36.3x | 22.0x | 19.2x |
| Software Average | | 7.1x | 6.3x | 5.4x | 22.4x | 22.8x | 20.0x | 29.2x | 26.8x | 26.0x |
| *Share Brice Converted to USD | | | | | | | | | | |

*Share Price Converted to USD



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

| | Enterprise | E | V/EBITD | A | 1 | P/E | | | EV/S | |
|--|---|----------|---------|--------------|----------|-------|-------|-------|-------|--------------|
| , | Value (\$mlns.) | C21 | C22E | C23E | C21 | C22E | C23E | C21 | C22E | C23E |
| Business & IT Services | (| <u> </u> | 7222 | 3202 | <u> </u> | 9222 | 3242 | 32. | 7222 | 3202 |
| CGI Inc. Class A | 26,370 | 10.7x | 10.7x | 10.1x | 18.2x | 18.2x | 16.3x | 2.2x | 2.2x | 2.0x |
| TELUS International (CDA), Inc. | 6,829 | NA | 12.6x | 11.0x | NA | 21.8x | 18.5x | 3.1x | 3.1x | 2.6x |
| Accenture Plc Class A | 172,657 | 18.0x | 14.5x | 13.3x | 30.6x | 24.9x | 22.3x | 3.4x | 2.7x | 2.5x |
| Booz Allen Hamilton | 12,342 | 13.8x | 12.9x | 12.1x | 18.3x | 17.9x | 16.2x | 1.6x | 1.4x | 1.3x |
| CACI International Inc Class A | 8,077 | 10.0x | 11.8x | 11.0x | 14.0x | 13.6x | 12.5x | 1.3x | 1.3x | 1.2x |
| DXC Technology Co. | 10,865 | 5.4x | 4.0x | 3.9x | NEG | 6.8x | 5.8x | 0.6x | 0.7x | 0.7x |
| Genpact Limited | 8,914 | 13.8x | 11.0x | 9.9x | 22.1x | 15.7x | 13.9x | 2.2x | 2.0x | 1.9x |
| International Business Machines | 166,682 | 12.4x | 10.1x | 9.7x | 20.9x | 13.6x | 12.5x | 2.9x | 2.7x | 2.7x |
| Atos SE | 4,315 | 4.1x | 3.9x | 3.5x | NEG | 9.6x | 6.6x | 0.4x | 0.4x | 0.4x |
| Capgemini SE | 36,461 | 12.6x | 10.8x | 9.8x | 27.1x | 17.9x | 15.8x | 2.0x | 1.8x | 1.6x |
| Sopra Steria Group SA | 4,431 | 8.4x | 7.4x | 6.7x | 16.9x | 11.5x | 10.1x | 0.9x | 0.9x | 0.8x |
| Business & IT Services Average | ., | 11.0x | 10.0x | 9.2x | 21.0x | 15.6x | 13.7x | 1.9x | 1.7x | 1.6x |
| | | | | | | | | | | |
| HR Outsourcing | | E | V/EBITD | A | | P/E | | | EV/S | |
| LifeWorks Inc | 1,722 | 8.8x | 8.8x | 8.6x | NEG | NEG | 21.0x | 1.7x | 1.7x | 1.6x |
| Ceridian HCM Holding, Inc. | 8,694 | >50 | 43.8x | 34.8x | NEG | >50 | >50 | 8.5x | 7.1x | 6.1x |
| Willis Towers Watson | 23,634 | 10.6x | 9.9x | 9.0x | 6.2x | 14.8x | 12.9x | 2.6x | 2.6x | 2.5x |
| Aon Pic Class A | 68,364 | 17.9x | 16.9x | 15.8x | 49.9x | 20.9x | 18.8x | 5.6x | 5.4x | 5.1x |
| Automatic Data Processing, Inc. | 87,021 | 22.7x | 19.6x | 17.8x | 34.0x | 28.0x | 25.1x | 5.8x | 5.1x | 4.8x |
| Paychex, Inc. | 42,205 | 25.5x | 20.0x | 18.7x | 38.7x | 29.9x | 27.7x | 10.4x | 8.9x | 8.4x |
| HR Outsourcing Average | , | 17.1x | 19.8x | 17.5x | 32.2x | 23.4x | 21.1x | 5.8x | 5.1x | 4.7x |
| | | | | | • | | | | | |
| | | | | | | | | | | |
| Information Services | | E | V/EBITD | Α | | P/E | | | EV/S | |
| Broadridge Financial Solutions, Inc. | 19,796 | 17.0x | 15.1x | 14.3x | 29.1x | 20.1x | 18.5x | 3.9x | 3.4x | 3.2x |
| Dye & Durham Ltd. | 1,130 | 7.1x | 7.1x | 5.3x | >50 | >50 | 22.2x | 3.0x | 3.0x | 2.0x |
| Deluxe Corporation | 2,513 | 6.8x | 5.7x | 5.5x | 17.0x | 5.3x | 4.9x | 1.2x | 1.1x | 1.1x |
| Information Services Corp | 357 | 5.3x | 5.3x | 6.5x | 9.7x | 9.7x | 11.3x | 2.1x | 2.1x | 2.1x |
| Information Services Average | | 9.1x | 8.3x | 7.9x | 18.6x | 11.7x | 14.2x | 2.6x | 2.4x | 2.1x |
| | | | | | T | | | | | |
| Financial Services Technology | | | V/EBITD | | | P/E | | | EV/S | |
| Fidelity National Information Services | 75,653 | 12.4x | 11.4x | 10.4x | >50 | 12.7x | 11.1x | 5.5x | 5.1x | 4.7x |
| Fiserv, Inc. | 81,073 | 14.6x | 11.4x | 10.5x | 46.7x | 14.4x | 12.5x | 5.0x | 4.9x | 4.6x |
| Jack Henry & Associates, Inc. | 12,919 | 18.5x | 20.5x | 18.6x | 42.7x | 34.8x | 31.8x | 7.3x | 6.4x | 6.0x |
| ACI Worldwide, Inc. | 3,911 | 10.7x | 9.6x | 8.9x | 23.4x | 19.0x | 16.1x | 2.9x | 2.7x | 2.6x |
| Temenos AG | 8,256 | 15.1x | 17.7x | 15.6x | 41.5x | 24.3x | 21.2x | 8.5x | 7.9x | 7.1x |
| Global Payments Inc. | 43,542 | 11.9x | 10.9x | 9.9x | 35.7x | 12.3x | 10.5x | 5.1x | 5.2x | 4.7x |
| Financial Services Technology Ave | rage | 13.9x | 13.6x | 12.3x | 38.0x | 19.6x | 17.2x | 5.7x | 5.4x | 5.0x |
| Diversified Real Estate Services | | | V/EBITD | ^ | I | P/E | | | EV/S | |
| Colliers International Group Inc. | 5,566 | 10.2x | 8.8x | 7.9x | -11.8x | 14.5x | 13.2x | 1.4x | 1.2x | 1.1x |
| Altus Group Limited | 2,119 | 20.5x | 20.0x | 16.8x | 30.0x | 30.0x | 31.7x | 3.4x | 3.4x | 3.0x |
| CBRE Group, Inc. Class A | 27,639 | 12.9x | 8.7x | 7.9x | 14.5x | 12.8x | 11.5x | 1.0x | 0.8x | 0.8x |
| Jones Lang LaSalle Incorporated | 11,295 | 7.7x | 7.5x | 7.3x 7.1x | 10.3x | 9.5x | 8.8x | 0.6x | 0.6x | 0.0x 0.7x |
| Diversified Real Estate Services Av | | 12.8x | 11.2x | 9.9x | 10.3x | 16.7x | 16.3x | 1.6x | 1.5x | 1.4x |
| Diversified Real Estate Services Av | crage | 12.0X | 11.24 | 0.0X | 10.17 | 10.77 | 10.0% | 1.01 | 1.01 | 11-77 |
| Software Focused IT Solutions/VAF | Rs | E | V/EBITD | A | | P/E | | | EV/S | |
| Softchoice Corporation* | 1,260 | 18.2x | 18.2x | 13.4x | 30.5x | 30.5x | 27.6x | 4.4x | 4.4x | 4.0x |
| Softcat Plc* | 2,480 | 14.7x | 14.5x | 13.6x | 19.7x | 19.9x | 19.3x | 6.6x | 6.2x | 5.7x |
| Crayon Group Holding ASA* | 12,157 | >50 | >50 | >50 | >50 | >50 | >50 | >50 | 28.5x | 24.0x |
| Bytes Technology Group Pic* | 979 | 20.1x | 16.3x | 15.2x | 22.4x | 21.4x | 20.4x | NA | NA | NA |
| SoftwareONE Holding Ltd.* | 1,437 | 8.7x | 5.9x | 5.1x | 16.0x | 14.8x | 12.6x | 6.9x | 1.5x | 1.3x |
| Bytes Technology Group Pic* Avera | · | 15.4x | 13.7x | 11.8x | 22.2x | 21.6x | 20.0x | 6.0x | 10.1x | 8.7x |
| | | | | | | | | | | |
| Business Services Average | | 13.0x | 12.7x | 11.4x | 24.1x | 17.8x | 16.5x | 3.6x | 4.0x | 3.6x |
| *Software Focused IT Solutions/VARs | uses FV/GP me | tric | | | | | | | | |

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



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% | 33% | 91% | 43% | 20,042 | 7.6x | 4.4x | 4.4x |
| CrowdStrike Holdings, Inc. | 66% | 31% | 48% | 30% | 97% | 78% | 30,486 | 34.9x | 14.6x | 14.6x |
| Shopify, Inc. | 57% | 10% | 30% | 3% | 67% | 34% | 33,535 | 7.3x | 5.7x | 5.7x |
| Zscaler, Inc. | 60% | 26% | 43% | 23% | 86% | 66% | 18,730 | 27.8x | 15.5x | 15.5x |
| Lightspeed POS, Inc. | 159% | -22% | 40% | -12% | 137% | 28% | 1,594 | 7.2x | 2.3x | 2.3x |
| DocuSign, Inc. | 45% | 23% | 17% | 19% | 68% | 37% | 13,593 | 9.4x | 5.6x | 5.6x |
| Veeva Systems Inc | 26% | 38% | 17% | 36% | 64% | 53% | 22,385 | 15.3x | 10.5x | 10.5x |
| Atlassian Corp. Plc | 33% | 29% | 25% | 22% | 62% | 48% | 42,594 | 20.4x | 13.5x | 13.5x |
| Twilio, Inc. | 61% | -3% | 36% | -2% | 58% | 34% | 12,755 | 4.5x | 3.3x | 3.3x |
| ServiceNow, Inc. | 29% | 31% | 26% | 30% | 61% | 56% | 83,171 | 14.1x | 11.2x | 11.2x |
| HubSpot, Inc. | 47% | 18% | 33% | 14% | 66% | 47% | 14,323 | 11.0x | 8.3x | 8.3x |
| Tier 1 SaaS (Rule of 40 > 60) | Average | | | | | | | 14.5x | 8.6x | 8.6x |

| | 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% | 917 | 8.8x | 8.8x | 6.3x |
| Qualys, Inc. | 14% | 43% | 17% | 34% | 56% | 51% | 4,010 | 9.7x | 8.3x | 8.3x |
| Descartes Systems | 22% | 40% | 12% | 37% | 62% | 50% | 4,652 | 11.0x | 11.0x | 9.8x |
| Avalara Inc | 40% | 6% | 23% | 0% | 45% | 23% | 5,742 | 8.2x | 6.6x | 6.6x |
| Five9, Inc. | 37% | 0% | 24% | 3% | 37% | 27% | 6,763 | 11.1x | 8.8x | 8.8x |
| Dropbox, Inc. | 13% | 34% | 8% | 33% | 47% | 41% | 8,084 | 3.7x | 3.5x | 3.5x |
| Mimecast Limited | 19% | 28% | 15% | 22% | 48% | 37% | 5,300 | 10.6x | 7.9x | 7.9x |
| Wix.com Ltd. | 28% | 5% | 14% | 3% | 33% | 18% | 3,048 | 2.4x | 2.1x | 2.1x |
| Workday, Inc. | 20% | 27% | 20% | 19% | 47% | 40% | 41,910 | 9.7x | 6.9x | 6.9x |
| VMware, Inc. | 9% | 31% | 7% | 28% | 40% | 35% | 51,446 | 4.4x | 3.8x | 3.8x |
| Tier 2 SaaS (Rule of 40 b | /w 40-60) Average | | | | | | | 8.0x | 6.7x | 6.4x |

| | 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% | 24% | 3,006 | 7.1x | 5.7x | 5.7x |
| Zendesk, Inc. | 31% | 12% | 26% | 12% | 43% | 38% | 12,302 | 9.2x | 7.2x | 7.2x |
| MongoDB, Inc. | 48% | 1% | 35% | 0% | 49% | 35% | 15,779 | 26.7x | 13.6x | 13.6x |
| LivePerson, Inc. | 28% | -8% | 18% | 0% | 20% | 18% | 1,297 | 2.8x | 2.3x | 2.3x |
| Rapid7 Inc. | 30% | 8% | 28% | 7% | 39% | 35% | 4,427 | 8.3x | 6.4x | 6.4x |
| Paylocity Holding Corp. | 25% | 16% | 25% | 15% | 41% | 40% | 8,727 | 13.7x | 9.3x | 9.3x |
| Q2 Holdings, Inc. | 24% | 2% | 21% | 2% | 26% | 23% | 2,478 | 5.0x | 4.3x | 4.3x |
| Akamai Technologies, Inc. | 8% | 25% | 8% | 23% | 33% | 32% | 17,567 | 5.1x | 4.8x | 4.8x |
| Tier 3 SaaS (Rule of 40 b/w | 28-40) Average | | | | | | | 9.7x | 6.7x | 6.7x |

| | 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 <2 | 28) | | | | | | | | | |
| RingCentral, Inc. | 35% | 6% | 26% | 7% | 41% | 33% | 7,032 | 4.4x | 3.5x | 3.5x |
| Teradata Corporation | 4% | 23% | 0% | 21% | 27% | 21% | 3,512 | 1.8x | 1.9x | 1.9x |
| Anaplan, Inc. | 32% | -5% | 26% | 0% | 27% | 26% | 9,448 | 21.1x | 12.9x | 12.9x |
| Zuora, Inc. | 14% | 7% | 16% | 0% | 20% | 16% | 1,087 | 3.6x | 2.7x | 2.7x |
| New Relic, Inc. | 15% | -4% | 16% | 4% | 11% | 20% | 2,851 | 4.3x | 3.2x | 3.2x |
| Kinaxis, Inc. | 4% | 7% | 35% | 8% | 11% | 43% | 2,598 | 10.4x | 10.4x | 7.4x |
| Yext, Inc. | 10% | 4% | 4% | -1% | 14% | 3% | 508 | 1.4x | 1.3x | 1.3x |
| Splunk Inc. | 20% | 4% | 22% | 12% | 24% | 35% | 15,827 | 7.1x | 4.9x | 4.9x |
| Tier 4 SaaS (Rule of 40 <2 | 28) Average | | | | | | | 6.8x | 5.1x | 4.7x |

SaaS Average



6.8x

10.0x 6.9x

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|----------------|--------------|---|
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