



Cassel Salpeter & Co.
INVESTMENT BANKING

Technology Investment Banking
Q4 2019 Update

Confidential

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Cassel Salpeter & Co. is a boutique investment banking firm focused on providing independent and objective advice to middle market and emerging growth companies. Finding the right financial partner in the fragmented technology market requires solid industry positioning and broad industry relationships. We can help.

Our experience and services include:

Mergers & Acquisitions

- Financial advisory
- Sales to strategic and private equity buyers
- Divestitures to strategic and private equity buyers
- Buy-side acquisition programs
- Leveraged & management buyouts
- Going private transactions

Capital Raising

- Financial advisory
- Equity and debt private placements
- Growth capital
- PIPEs
- Recapitalizations

Other Services

- Fairness opinions
- Solvency opinions
- Valuations
- Restructuring, refinancing, and distressed M&A transactions
 - Debtor and creditor representations
 - 363 sales & plans of reorganization



James Cassel
Chairman
jcassel@cs-ib.com
305-438-7701



Scott Salpeter
President
ssalpeter@cs-ib.com
305-438-7702

www.casselsalpeter.com

I **Q4 TECHNOLOGY DEALS**

II M&A TRANSACTIONS

III PUBLIC MARKETS REVIEW

Q4 2019 SELECTED MERGERS AND ACQUISITIONS

Selected Transactions Review

(\$ in millions)

| Transaction | | | | Metrics | | | Valuation Benchmarks | | | |
|-------------|-----------|--|---|------------------|------------|----------|----------------------|--------|----------------------|---------|
| Date | | Target | Acquirer | Enterprise Value | Target TTM | | Implied EV / | | Stock Price Premiums | |
| Ann. | Closed | | | | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month |
| 24-Dec-19 | na | Anixter International Inc. | WESCO International, Inc. | \$ 4,751.5 | \$ 8,712.4 | 4.9% | 0.55x | 11.08x | 14.4% | 16.1% |
| 19-Dec-19 | na | TiVo Corporation | Xperi Corporation | 1,730.0 | 661.4 | 25.0% | 2.62x | 10.46x | 20.8% | 32.5% |
| 19-Dec-19 | na | Shape Security, Inc. | F5 Networks, Inc. | 1,028.0 | na | na | na | na | na | na |
| 17-Dec-19 | na | LogMeIn, Inc. | Francisco Partners; Evergreen Coast Capital | 4,557.8 | 1,247.9 | 25.5% | 3.65x | 14.30x | 4.4% | 6.2% |
| 4-Dec-19 | na | Flexible Arch. and Simplified Tech., LLC | Verisk Analytics, Inc. | 193.5 | na | na | na | na | na | na |
| 4-Dec-19 | na | Instructure, Inc. | Thoma Bravo, LLC | 1,883.7 | 245.5 | -24.1% | 7.67x | na | -10.1% | 2.4% |
| 25-Nov-19 | na | StubHub, Inc. | viagogo AG | 4,050.0 | na | na | na | na | na | na |
| 25-Nov-19 | 23-Dec-19 | Aporeto, Inc. | Palo Alto Networks, Inc. | 150.0 | na | na | na | na | na | na |
| 13-Nov-19 | 6-Dec-19 | Medfusion, Inc. | NextGen Healthcare, Inc. | 43.0 | na | na | na | na | na | na |
| 11-Nov-19 | 23-Dec-19 | Carbonite, Inc. | Open Text Corporation | 1,395.8 | 405.3 | 9.8% | 3.44x | 34.99x | 25.0% | 59.0% |
| 3-Nov-19 | 25-Nov-19 | ObserveIT LTD. | Proofpoint, Inc. | 225.0 | na | na | na | na | na | na |
| 22-Oct-19 | na | Cision Ltd. | MJ23 UK Acquisition Limited | 2,782.8 | 748.3 | 29.6% | 3.72x | 12.54x | 18.3% | 35.0% |
| 3-Oct-19 | 3-Oct-19 | Datatrend Technologies, Inc. | Converge Technology Solutions Corp. | 17.5 | 84.3 | 3.7% | 0.21x | 5.65x | na | na |

Sources of information: S&P Capital IQ.

I Q4 TECHNOLOGY DEALS

II M&A TRANSACTIONS

III PUBLIC MARKETS REVIEW

Selected Transactions Review

(\$ in millions)

| Date | | Transaction | | Enterprise | Metrics | | Valuation Benchmarks | | | |
|-----------------------------|-----------|-------------------------------------|-------------------------------------|------------|------------|----------|----------------------|--------|----------------------|---------|
| Ann. | Closed | Target | Acquirer | Value | Target TTM | | Implied EV / | | Stock Price Premiums | |
| | | | | | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month |
| Application Software | | | | | | | | | | |
| 17-Dec-19 | na | LogMeIn, Inc. | Francisco Partners; Evergreen Coast | \$ 4,557.8 | \$ 1,247.9 | 25.5% | 3.65x | 14.30x | 4.4% | 6.2% |
| 4-Dec-19 | na | Instructure, Inc. | Thoma Bravo, LLC | 1,883.7 | 245.5 | -24.1% | 7.67x | na | -10.1% | 2.4% |
| 22-Oct-19 | na | Cision Ltd. | MJ23 UK Acquisition Limited | 2,782.8 | 748.3 | 29.6% | 3.72x | 12.54x | 18.3% | 35.0% |
| 11-Sep-19 | 1-Nov-19 | Livermore Software Technology Corp. | ANSYS, Inc. | 778.8 | na | na | na | na | na | na |
| 5-Sep-19 | 10-Oct-19 | Assurance IQ, Inc. | Prudential Financial, Inc. | 3,500.0 | na | na | na | na | na | na |
| 22-Aug-19 | 30-Dec-19 | Pivotal Software, Inc. | VMware, Inc. | 2,972.1 | 746.2 | -15.8% | 3.98x | na | 9.7% | 51.5% |
| 26-Jul-19 | 11-Oct-19 | Monotype Imaging Holdings Inc. | HGGC, LLC | 858.3 | 244.0 | 22.4% | 3.52x | 15.74x | 22.8% | 18.3% |
| 10-Jun-19 | 31-Jul-19 | Tableau Software, Inc. | salesforce.com, inc. | 16,337.3 | 1,231.4 | -8.5% | 13.27x | na | 42.1% | 43.5% |
| 6-Jun-19 | na | Looker Data Sciences, Inc. | Google LLC | 2,600.0 | na | na | na | na | na | na |
| 13-May-19 | 1-Jul-19 | Amber Road, Inc. | E2open, LLC | 424.0 | 86.2 | -7.6% | 4.92x | na | 26.7% | 45.5% |
| 9-May-19 | 1-Aug-19 | Control4 Corporation | Wirepath Home Systems, LLC | 625.0 | 273.7 | 10.1% | 2.28x | 22.54x | 39.7% | 41.7% |
| 23-Jan-19 | 23-Jan-19 | Trendkite, Inc. | Cision Ltd. | 224.4 | 25.4 | na | 8.83x | na | na | na |
| 8-Jan-19 | 7-Jan-19 | Dynasty Marketplace, Inc. | AppFolio, Inc. | 60.2 | na | na | na | na | na | na |
| 2-Jan-19 | 2-Jan-19 | YourCause, LLC | Blackbaud, Inc. | 157.7 | na | na | na | na | na | na |
| 11-Nov-18 | 10-Jan-19 | Apptio, Inc. | Vista Equity Partners LLC | 1,867.2 | 224.7 | -6.2% | 8.31x | na | 52.9% | 24.9% |
| 11-Nov-18 | 23-Jan-19 | Qualtrics International Inc. | SAP America, Inc. | 8,000.0 | 372.4 | 3.1% | 21.48x | na | na | na |
| 15-Oct-18 | 1-Feb-19 | SendGrid, Inc. | Twilio Inc. | 1,831.6 | 137.2 | 4.8% | 12.50x | na | 17.3% | 0.5% |
| 20-Sep-18 | 31-Oct-18 | Marketo, Inc. | Adobe Inc. | 4,750.0 | na | na | na | na | na | na |
| 11-Jun-18 | 1-Aug-18 | Adaptive Insights, Inc. | Workday, Inc. | 1,500.0 | 114.3 | -32.6% | na | na | na | na |
| 26-Apr-18 | 20-Aug-18 | Mattersight Corporation | Nice Systems, Inc. | 111.2 | 50.4 | -8.2% | 2.21x | na | 25.6% | 28.6% |
| 24-Apr-18 | 31-May-18 | PeopleFluent, Inc. | Learning Technologies Group plc | 150.0 | 106.6 | 12.6% | 1.41x | 11.19x | na | na |
| 30-Jan-18 | 5-Apr-18 | Callidus Software Inc. | SAP America, Inc. | 2,425.9 | 253.1 | -2.2% | 9.59x | na | 10.1% | 25.7% |
| 25-Jul-17 | 3-Aug-17 | Intacct Corporation | The Sage Group plc | 850.0 | 88.0 | na | 9.66x | na | na | na |
| 30-May-17 | 31-Jul-17 | Xactly Corporation | Vista Equity Partners | 530.6 | 96.8 | -12.6% | 5.48x | na | 16.8% | 34.9% |
| 26-May-17 | 25-May-17 | iSystems, LLC | Asure Software, Inc. | 76.7 | 12.9 | 6.2% | 5.96x | nm | na | na |
| 1-May-17 | 9-Jun-17 | Jive Software, Inc. | Wave Systems Corp. | 343.5 | 203.5 | 2.4% | 1.69x | nm | 4.0% | 22.1% |
| 28-Apr-17 | 12-Sep-17 | Guavus, Inc. | Thales S.A. | 215.0 | 30.0 | na | 7.17x | na | na | na |
| 31-Jan-17 | 27-Jan-17 | IDV Solutions, LLC | Everbridge, Inc. | 27.3 | 10.2 | 7.4% | 2.67x | 36.11x | na | na |
| 14-Nov-16 | 30-Mar-17 | Mentor Graphics Corporation | Siemens Industry, Inc. | 4,389.9 | 1,282.5 | 20.7% | 3.42x | 16.54x | 21.4% | 35.4% |
| 9-Nov-16 | 19-Dec-16 | TubeMogul, Inc. | Adobe Inc. | 544.6 | 212.0 | -9.8% | 2.57x | na | 82.1% | 56.3% |
| <i>Mean</i> | | | | \$ 2,179.2 | \$ 335.1 | 0.8% | 6.35x | 18.42x | 24.0% | 29.5% |
| <i>Median</i> | | | | \$ 854.1 | \$ 207.8 | 2.4% | 4.92x | 15.74x | 19.9% | 31.7% |

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

| Date | | Transaction | | Enterprise | Metrics | | Valuation Benchmarks | | | |
|----------------------------|-----------|--|--|------------|------------|----------|----------------------|---------|----------------------|---------|
| Ann. | Closed | Target | Acquirer | Value | Target TTM | | Implied EV / | | Stock Price Premiums | |
| | | | | | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month |
| Vertical Software | | | | | | | | | | |
| 19-Dec-19 | na | TiVo Corporation | Xperi Corporation | \$ 1,730.0 | \$ 661.4 | 25.0% | 2.62x | 10.46x | 20.8% | 32.5% |
| 4-Dec-19 | na | Flexible Arch. and Simplified Tech., LLC | Verisk Analytics, Inc. | 193.5 | na | na | na | na | na | na |
| 3-Sep-19 | 21-Oct-19 | MAM Software Group, Inc. | Kerridge Commercial Systems, Ltd. | 153.2 | 37.7 | 14.5% | 4.06x | 28.04x | 14.3% | 10.7% |
| 8-Aug-19 | 22-Aug-19 | iPipeline | Roper Technologies, Inc. | 1,625.0 | na | na | na | na | na | na |
| 2-Jul-19 | 1-Jul-19 | D3 Technology Inc. | NCR Corporation | 84.0 | na | na | na | na | na | na |
| 24-Jun-19 | 25-Oct-19 | Nanometrics Incorporated | Rudolph Technologies, Inc. | na | 288.3 | 14.8% | na | na | na | na |
| 3-Jun-19 | 31-May-19 | Pace Payment Systems, Inc. | i3-SDCR, Inc. | 134.5 | 29.1 | 2.9% | 4.63x | 159.59x | na | na |
| 28-May-19 | 17-Sep-19 | Total System Services, Inc. | Global Payments Inc. | 27,929.0 | 4,103.5 | 29.6% | 6.81x | 23.01x | 9.6% | 23.5% |
| 15-Apr-19 | 12-Apr-19 | Synovia Solutions, LLC | CalAmp Corp. | 49.8 | 28.0 | na | 1.78x | na | na | na |
| 12-Feb-19 | 17-Apr-19 | Ellie Mae, Inc. | Thoma Bravo | 3,380.7 | 480.3 | 11.8% | 7.04x | 59.58x | 20.8% | 46.3% |
| 6-Sep-18 | 16-Nov-18 | IntraLinks Holdings, Inc. | SS&C Technologies Holdings, Inc. | 1,428.4 | 325.0 | 40.6% | 4.39x | 10.82x | na | na |
| 10-Aug-18 | 4-Oct-18 | TravelClick, Inc. | Amadeus Americas, Inc. | 1,520.0 | 373.0 | 23.1% | 4.08x | 17.67x | na | na |
| | | | <i>Mean</i> | \$ 3,475.3 | \$ 702.9 | 20.3% | 4.43x | 44.17x | 16.4% | 28.2% |
| | | | <i>Median</i> | \$ 1,428.4 | \$ 325.0 | 18.9% | 4.24x | 23.01x | 17.5% | 28.0% |
| Healthcare Software | | | | | | | | | | |
| 13-Nov-19 | 6-Dec-19 | Medfusion, Inc. | NextGen Healthcare, Inc. | \$ 43.0 | na | na | na | na | na | na |
| 26-Sep-19 | 1-Nov-19 | Crossix Solutions Inc. | Veeva Systems Inc. | 431.8 | na | na | na | na | na | na |
| 11-Jul-19 | 16-Jul-19 | Jungla Inc. | Invitae Corporation | 67.1 | na | na | na | na | na | na |
| 12-Jun-19 | 28-Oct-19 | Medidata Solutions, Inc. | Dassault Systemes Americas Corp. | 5,818.3 | 684.6 | 11.4% | 8.50x | 74.54x | -2.6% | 4.3% |
| 17-May-19 | 24-Jul-19 | InstaMed Communications, LLC | JPMorgan Chase Bank, National Ass. | 500.0 | 62.5 | na | 8.00x | na | na | na |
| 13-Feb-19 | 1-Apr-19 | Auris Health, Inc. | Ethicon US, LLC | 5,750.0 | na | na | na | na | na | na |
| 11-Mar-19 | 1-Apr-19 | Voalte, Inc. | Hill-Rom, Inc. | 195.0 | 40.0 | na | 4.88x | na | na | na |
| 5-Mar-19 | 5-Mar-19 | Prescribe Wellness, LLC | Tabula Rasa HealthCare, Inc. | 150.0 | 29.0 | 1.0% | 5.17x | na | na | na |
| 7-Mar-18 | 2-Apr-18 | ABILITY Network Inc. | Inovalon Holdings, Inc. | 1,200.0 | 140.0 | 51.5% | 8.57x | 16.64x | na | na |
| 26-Feb-18 | 8-May-18 | Intermedix Corporation | R1 RCM Inc. | 460.0 | 193.0 | 24.9% | 2.38x | 9.58x | na | na |
| 9-Aug-16 | 21-Oct-16 | Press Ganey Holdings, Inc. | EQT Partners AB | 2,392.6 | 344.3 | 30.5% | 6.95x | 22.80x | 0.4% | 1.1% |
| 13-Jul-16 | 16-Sep-16 | Imprivata, Inc. | Thoma Bravo | 496.9 | 131.1 | -14.1% | 3.79x | na | 32.8% | 37.5% |
| 30-Jun-16 | 1-Jul-16 | HealthiestYou, Inc. | Teladoc, Inc. (nka:Teladoc Health, Inc.) | 155.8 | 10.0 | na | 15.58x | na | na | na |
| 22-Feb-16 | 4-Apr-16 | Brightree LLC | ResMed Corp. | 800.0 | 113.2 | 37.3% | 7.07x | 18.93x | na | na |
| | | | <i>Mean</i> | \$ 1,318.6 | \$ 174.8 | 20.4% | 7.09x | 28.50x | 10.2% | 14.3% |
| | | | <i>Median</i> | \$ 478.5 | \$ 122.2 | 24.9% | 7.01x | 18.93x | 0.4% | 4.3% |

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

| Transaction | | | | Metrics | | | Valuation Benchmarks | | | |
|--------------------------------|-----------|---------------------------------|-------------------------------------|------------------|------------|----------|----------------------|--------|----------------------|---------|
| Date | | Target | Acquirer | Enterprise Value | Target TTM | | Implied EV / | | Stock Price Premiums | |
| Annc. | Closed | | | | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month |
| Infrastructure Software | | | | | | | | | | |
| 11-Nov-19 | 23-Dec-19 | Carbonite, Inc. | Open Text Corporation | \$ 1,395.8 | \$ 405.3 | 9.8% | 3.44x | 34.99x | 25.0% | 59.0% |
| 3-Oct-19 | 3-Oct-19 | Datatrend Technologies, Inc. | Converge Technology Solutions Corp. | 17.5 | 84.3 | 3.7% | 0.21x | 5.65x | na | na |
| 26-Jun-19 | 9-Aug-19 | Aerohive Networks, Inc. | Extreme Networks, Inc. | 217.0 | 149.7 | -11.5% | 1.45x | na | 39.5% | 30.9% |
| 1-Feb-19 | 28-Feb-19 | MicroPact Inc. | Tyler Technologies, Inc. | 204.2 | 70.0 | na | 2.92x | na | na | na |
| 4-Mar-19 | 1-Apr-19 | Mist Systems, Inc. | Juniper Networks, Inc. | 404.2 | na | na | na | na | na | na |
| 28-Oct-18 | 9-Jul-19 | Red Hat, Inc. | International Business Machines | 33,125.3 | 3,482.7 | 19.9% | 9.51x | 47.68x | 62.8% | 39.4% |
| 3-Oct-18 | 3-Jan-19 | Hortonworks, Inc. | Cloudera, Inc. | 2,005.4 | 327.6 | -46.3% | 6.12x | na | 2.6% | -1.2% |
| 11-Jul-18 | 5-Nov-18 | CA, Inc. | Broadcom Inc. | 18,588.0 | 4,148.0 | 30.2% | 4.64x | 16.38x | 19.8% | 22.3% |
| 4-Jun-18 | 25-Oct-18 | GitHub, Inc. | Microsoft Corporation | 7,500.0 | 300.0 | na | 25.00x | na | na | na |
| 12-Apr-18 | 17-Jul-18 | Actian Corporation | HCL Tech; Sumeru Equity | 330.0 | 107.1 | 35.9% | 3.08x | 8.57x | na | na |
| 20-Mar-18 | 1-May-18 | MuleSoft, Inc. | salesforce.com, inc. | 6,569.5 | 296.5 | -25.6% | 22.16x | na | 35.9% | 45.7% |
| 17-Oct-17 | 14-Nov-17 | IntraLinks Holdings, Inc. | Siris Capital Group, LLC | 1,020.8 | 295.5 | 7.5% | 3.45x | 46.06x | na | na |
| 5-Jun-17 | 24-Jan-17 | Covisint Corporation | Open Text Corporation | 69.2 | 73.8 | -14.4% | 0.99x | na | 22.5% | 28.9% |
| 31-Jan-17 | 31-Jan-17 | Double-Take Software, Inc. | Carbonite, Inc. | 67.3 | 84.0 | 16.5% | 1.65x | 43.39x | na | na |
| 24-Jan-17 | 22-Mar-17 | AppDynamics LLC | Cisco Systems, Inc. | 3,902.9 | 206.2 | -51.1% | 18.93x | na | na | na |
| 9-Jan-17 | 3-Feb-17 | Trello, Inc. | Atlassian, Inc. | 425.0 | na | na | na | na | na | na |
| 6-Dec-16 | 19-Jan-17 | IntraLinks Holdings, Inc. | Synchronoss Technologies, Inc. | 831.5 | 290.4 | 6.9% | 2.81x | 37.52x | 15.4% | 33.5% |
| 12-Sep-16 | 23-Jan-17 | EMC Enterprise Content Division | Open Text Corporation | 1,620.0 | 599.0 | na | 2.70x | na | na | na |
| 8-Sep-16 | 10-Nov-16 | Apigee Corporation | Google Inc. (nka:Google LLC) | 561.8 | 92.0 | -42.9% | 6.10x | na | 6.5% | 20.3% |
| 7-Sep-16 | 1-Sep-17 | HPE, Software | Micro Focus International plc | 9,049.3 | 3,172.0 | 20.7% | 2.85x | 11.40x | na | na |
| 26-Jul-16 | 31-Jan-17 | Citrix GoTo Family Of Products | LogMeln, Inc. | 2,896.8 | 600.0 | na | 4.83x | na | na | na |
| 15-Jan-16 | 5-Jan-16 | Jungle Disk, LLC | Porthcawl Holdings, LLC | 27.0 | 12.0 | na | 2.25x | na | na | na |
| 21-Oct-15 | 5-Feb-16 | SolarWinds Corporation | Silver Lake; Thoma Bravo, LLC | 4,446.3 | 485.9 | 30.9% | 9.15x | 29.64x | 19.7% | 44.1% |
| 9-Oct-15 | 15-Oct-15 | Marvasol, Inc. | LogMeln, Inc. | 115.7 | 11.2 | -23.7% | 10.30x | na | na | na |
| 10-Sep-15 | 8-Dec-15 | Premiere Global Services, Inc. | Siris Capital Group | 975.1 | 566.8 | 13.0% | 1.72x | 13.23x | 25.9% | 27.5% |
| 11-Aug-15 | 29-Jan-16 | Veritas Technologies LLC | The Carlyle Group; GIC Pte. Ltd. | 7,000.0 | 2,600.0 | na | 2.69x | na | na | na |
| <i>Mean</i> | | | | \$ 3,975.6 | \$ 769.2 | -1.1% | 6.21x | 26.77x | 25.1% | 31.9% |
| <i>Median</i> | | | | \$ 998.0 | \$ 296.0 | 7.2% | 3.26x | 29.64x | 22.5% | 30.9% |

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

| Date | | Transaction | | Enterprise | Metrics | | Valuation Benchmarks | | | | |
|-----------------|-----------|---------------------------------|--------------------------------------|------------|------------|----------|----------------------|--------|----------------------|---------|-------|
| Ann. | Closed | Target | Acquirer | Value | Target TTM | | Implied EV / | | Stock Price Premiums | | |
| | | | | | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month | |
| Security | | | | | | | | | | | |
| 19-Dec-19 | na | Shape Security, Inc. | F5 Networks, Inc. | \$ 1,028.0 | na | na | na | na | na | na | |
| 25-Nov-19 | 23-Dec-19 | Aporeto, Inc. | Palo Alto Networks, Inc. | 150.0 | na | na | na | na | na | na | |
| 3-Nov-19 | 25-Nov-19 | ObserveIT LTD. | Proofpoint, Inc. | 225.0 | na | na | na | na | na | na | |
| 22-Aug-19 | 7-Oct-19 | Carbon Black, Inc. | VMware, Inc. | 2,063.8 | 229.7 | -28.6% | 8.98x | na | 14.3% | 42.1% | |
| 5-Jun-19 | 8-Oct-19 | Endgame, Inc. | Elastic N.V. | 227.8 | \$ 19.0 | na | 11.99x | na | na | na | |
| 7-Feb-19 | 26-Mar-19 | Webroot Inc. | Carbonite, Inc. | 618.5 | 215.0 | na | 2.88x | na | na | na | |
| 15-Jan-19 | 20-Feb-19 | AppRiver, LLC | Zix Corporation | 268.5 | na | na | na | na | na | na | |
| 16-Nov-18 | 21-Feb-19 | Cylance Inc. | BlackBerry Limited | 1,500.0 | 130.0 | na | 11.54x | na | na | na | |
| 5-Nov-18 | 31-Dec-18 | Veracode, Inc. | Thoma Bravo, LLC | 950.0 | na | na | na | na | na | na | |
| 10-Oct-18 | 10-Jan-19 | Imperva, Inc. | Thoma Bravo, LLC | 1,814.7 | 351.8 | 1.4% | 5.16x | na | 29.5% | 21.5% | |
| 3-Jan-18 | 31-Jan-18 | Spikes Inc. | KPMG LLP | 34.2 | 27.1 | na | 1.27x | na | na | na | |
| 27-Nov-17 | 12-Feb-18 | Barracuda Networks, Inc. | Thoma Bravo | 1,433.9 | 372.5 | 8.6% | 3.85x | nm | 16.3% | 17.6% | |
| 7-Nov-17 | 21-Nov-17 | Cloudmark Inc. | Proofpoint, Inc. | 110.0 | na | na | na | na | na | na | |
| 6-Mar-17 | 3-Apr-17 | Veracode, Inc. | CA, Inc. | 614.0 | na | na | na | na | na | na | |
| 8-Feb-17 | 22-Mar-17 | Invincea, Inc. | Sophos Group plc | 120.0 | 9.8 | na | 12.24x | na | na | na | |
| 20-Nov-16 | 9-Feb-17 | LifeLock, Inc. | Symantec Corporation | 2,362.1 | 650.2 | 7.3% | 3.63x | nm | 15.7% | 38.7% | |
| 19-Sep-16 | 4-Nov-16 | Infoblox Inc. | Vista Equity Partners | 1,250.0 | 358.3 | 0.5% | 3.49x | na | 16.1% | 31.6% | |
| 13-Jul-16 | 16-Sep-16 | Imprivata, Inc. | Thoma Bravo | 496.9 | 131.1 | -14.1% | 3.79x | na | 32.8% | 37.5% | |
| 12-Jun-16 | 1-Aug-16 | Blue Coat, Inc. | Symantec Corporation | 4,726.7 | 598.3 | 1.5% | 7.24x | nm | na | na | |
| 1-Jun-16 | 30-Jun-16 | Ping Identity Corporation | Vista Equity Partners | 600.0 | na | na | na | na | na | na | |
| 18-Apr-16 | 15-Aug-16 | CSIdentity Corporation | Experian Information Solutions, Inc. | 360.0 | 103.0 | 20.4% | 3.50x | 17.14x | na | na | |
| 20-Jan-16 | 14-Jan-16 | iSight Security, Inc. | FireEye, Inc. | 271.1 | 40.0 | na | 6.78x | na | na | na | |
| 11-Dec-15 | 11-Dec-15 | Cyveillance, Inc. | LookingGlass Cyber Solutions Inc. | 35.0 | 18.0 | na | 1.94x | na | na | na | |
| 9-Nov-15 | closed | Elastica, Inc. | Blue Coat Systems Inc. | 280.0 | na | na | na | na | na | na | |
| 27-Oct-15 | 21-Dec-15 | Lancope, Inc. | Cisco Systems, Inc. | 452.5 | na | na | na | na | na | na | |
| 21-Oct-15 | 9-Mar-16 | TippingPoint Technologies, Inc. | Trend Micro Incorporated | 300.0 | 169.0 | na | 1.78x | na | na | na | |
| 19-Oct-15 | 17-Mar-16 | Vormetric, Inc. | Thales e-Security, Inc. | 421.0 | 53.5 | na | 7.87x | na | na | na | |
| 8-Sep-15 | 8-Sep-15 | Adallom, Inc. | Microsoft Corporation | 320.0 | na | na | na | na | na | na | |
| 7-Apr-15 | 1-Sep-15 | TrustWave Holdings, Inc. | Singapore Telecommunications | 785.7 | 216.0 | na | 3.64x | na | na | na | |
| 10-Mar-15 | 26-May-15 | Blue Coat Systems Inc. | Bain Capital Private Equity, LP | 2,400.0 | na | na | na | na | na | na | |
| | | | | Mean | \$ 874.0 | \$ 205.1 | -0.4% | 5.64x | 17.14x | 20.8% | 31.5% |
| | | | | Median | \$ 474.7 | \$ 150.1 | 1.4% | 3.82x | 17.14x | 16.2% | 34.6% |

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

| Date | | Transaction | | Metrics | | | Valuation Benchmarks | | | | |
|---------------------------|-----------|---------------------------------------|--|------------|------------|----------|----------------------|--------|----------------------|---------|--|
| Ann. | Closed | Target | Acquirer | Enterprise | Target TTM | | Implied EV / | | Stock Price Premiums | | |
| | | | | Value | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month | |
| Enterprise Systems | | | | | | | | | | | |
| 7-Aug-19 | 20-Sep-19 | Esterline Interface Technologies Ltd. | KPS Capital Partners, LP | \$ 190.0 | \$ 190.0 | na | 1.00x | na | na | na | |
| 24-Jun-19 | 30-Aug-19 | PCM, Inc. | Insight Enterprises, Inc. | 621.8 | 2,157.0 | 2.6% | 0.29x | 11.03x | 43.6% | 32.5% | |
| 17-May-19 | 25-Sep-19 | Cray Inc. | Hewlett Packard Enterprise Company | 1,394.3 | 396.4 | -21.7% | 3.52x | na | 17.4% | 26.9% | |
| 28-Mar-19 | 15-Apr-19 | Ipswitch, Inc. | Progress Software Corporation | 225.3 | 75.0 | na | 3.00x | na | na | na | |
| 27-Mar-19 | 19-Jun-19 | Quantenna Communications, Inc. | ON Semiconductor Corporation | 955.5 | 233.0 | 5.5% | 4.10x | 74.15x | 19.3% | 29.6% | |
| 18-Mar-19 | 31-Jul-19 | Worldpay, Inc. | Fidelity National Information Services | 49,565.0 | 4,044.7 | 39.9% | 12.06x | 29.11x | 13.6% | 27.0% | |
| 11-Mar-19 | na | Mellanox Technologies, Ltd. | NVIDIA Corporation | 6,664.4 | 1,240.9 | 23.4% | 5.37x | 22.91x | 14.3% | 28.7% | |
| 28-Feb-19 | 9-May-19 | SpeedPay, Inc. | ACI Worldwide, Inc. | 750.0 | 350.0 | 25.7% | 2.14x | 8.33x | na | na | |
| 4-Feb-19 | 3-May-19 | The Ultimate Software Group, Inc. | Hellman & Friedman & Others | 10,963.9 | 1,198.8 | 9.8% | 9.15x | 93.74x | 19.3% | 32.2% | |
| 16-Jan-19 | 29-Jul-19 | First Data Corporation | Fiserv, Inc. | 48,634.5 | 8,764.0 | 38.7% | 5.55x | 14.35x | 29.6% | 38.5% | |
| 28-Mar-18 | 2-Jul-18 | Polycom, Inc. | Plantronics, Inc. | 2,122.4 | 1,142.8 | 8.3% | 1.86x | 21.00x | na | na | |
| 26-Oct-17 | 27-Dec-17 | Gigamon Inc. | Elliott, Qatar Investment Authority | 1,329.1 | 302.9 | 1.4% | 4.39x | na | 6.2% | -7.3% | |
| 18-Sep-17 | 5-Jan-18 | Silver Spring Networks, Inc. | Itron, Inc. | 830.4 | 425.7 | -8.2% | 1.95x | na | 25.0% | 28.2% | |
| 7-Mar-17 | 13-Apr-17 | Nimble Storage, Inc. | Hewlett Packard Enterprise Company | 1,065.1 | 402.6 | -33.3% | 2.65x | na | 45.3% | 45.9% | |
| 13-Oct-16 | 13-Oct-16 | VXi Corporation | GN Audio A/S | 35.0 | 32.0 | 12.5% | 1.09x | 8.75x | na | na | |
| 19-Sep-16 | 4-Nov-16 | Infoblox Inc. | Vista Equity Partners | 1,250.0 | 358.3 | 0.5% | 3.49x | na | 16.1% | 31.6% | |
| 11-Aug-16 | 1-Nov-16 | Silicon Graphics International Corp. | Hewlett Packard Enterprise Company | 268.4 | 532.9 | 1.0% | 0.50x | 48.58x | 40.9% | 47.3% | |
| 13-May-16 | 27-Sep-16 | Polycom, Inc. | Siris Capital Group, LLC | 1,231.7 | 1,197.8 | 11.2% | 1.03x | 9.19x | 11.0% | 5.8% | |
| 19-Apr-16 | 29-Nov-16 | Lexmark International, Inc. | Legend Capital; PAG Asia; Apex Tech. | 3,645.2 | 3,481.5 | 9.1% | 1.05x | 11.46x | 18.0% | 29.6% | |
| 7-Apr-16 | 3-Jun-16 | Alliance Fiber Optic Products Inc. | Corning Incorporated | 265.9 | 72.0 | 22.3% | 3.69x | 16.58x | 24.0% | 45.1% | |
| 4-Apr-16 | 27-May-16 | Ruckus Wireless, Inc. | Brocade Communications | 1,114.4 | 391.9 | 4.5% | 2.84x | 63.51x | 44.3% | 47.4% | |
| 4-Feb-16 | 29-Jan-16 | Pakedge Device & Software, Inc. | Control4 Corporation | 31.8 | 18.6 | 3.9% | 1.71x | 43.95x | na | na | |
| 21-Dec-15 | 2-Feb-16 | SolidFire | NetApp, Inc. | 870.0 | na | na | na | na | na | na | |
| 2-Nov-15 | 5-Oct-16 | Hutchinson Technology Inc. | TDK Headway Technologies, Inc. | 233.4 | 234.6 | 8.1% | 0.99x | 12.28x | 128.6% | 135.3% | |
| 21-Oct-15 | 12-May-16 | SanDisk LLC | Western Digital Technologies, Inc. | 13,510.4 | 5,598.4 | 24.4% | 2.41x | 9.90x | 13.5% | 61.4% | |
| 12-Oct-15 | 7-Sep-16 | EMC Corporation (nka:Dell EMC) | Dell, Inc. | 63,296.5 | 24,586.0 | 20.4% | 2.57x | 12.61x | 19.0% | 34.8% | |
| 2-Sep-15 | 1-Oct-15 | iBiquity Digital Corporation | DTS, Inc. | 612.4 | 48.3 | 17.3% | 12.68x | 73.08x | na | na | |
| 18-Aug-15 | 6-Oct-15 | Dot Hill Systems Corp. | Seagate Technology plc | 645.4 | 243.9 | 7.7% | 2.65x | 34.31x | 79.2% | 51.9% | |
| 27-May-15 | 7-Jul-15 | Meru Networks, Inc. | Fortinet, Inc. | 34.6 | 87.7 | -16.9% | 0.39x | na | 18.1% | 31.5% | |
| 22-Apr-15 | 4-Jun-15 | Procera Networks, Inc. | Francisco Partners Management LLC | 133.2 | 81.4 | -6.4% | 1.64x | na | 21.7% | 19.1% | |
| 16-Apr-15 | 17-Apr-15 | Motion Computing, Inc. | Xplore Technologies | 130.1 | 78.8 | -5.7% | 1.65x | na | na | na | |
| <i>Mean</i> | | | | \$ 6,858.7 | \$ 1,932.3 | 7.4% | 3.25x | 30.94x | 30.4% | 37.4% | |
| <i>Median</i> | | | | \$ 870.0 | \$ 375.1 | 7.9% | 2.49x | 18.79x | 19.3% | 31.9% | |

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

| Transaction | | | | Metrics | | | Valuation Benchmarks | | | |
|------------------------------------|-----------|-----------------------------|---|------------------|------------|----------|----------------------|---------|----------------------|---------|
| Date | | Target | Acquirer | Enterprise Value | Target TTM | | Implied EV / | | Stock Price Premiums | |
| Annnc. | Closed | | | | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month |
| Internet Content and Search | | | | | | | | | | |
| 24-Jul-17 | 14-Sep-17 | WebMD Health Corp. | KKR | \$ 2,641.2 | \$ 709.0 | 26.0% | 3.73x | 14.31x | 20.5% | 12.3% |
| 3-Jul-17 | 8-Nov-17 | Baton Holding, LLC | Red Ventures Holdco, LP | 1,434.7 | 477.0 | 21.2% | 3.01x | 14.18x | 8.9% | 31.5% |
| 1-May-17 | 29-Sep-17 | Angie's List, Inc. | HomeAdvisor, Inc. | 580.3 | 302.3 | 1.2% | 1.92x | 161.23x | 44.6% | 49.1% |
| 10-Apr-17 | 22-May-17 | RetailMeNot, Inc. | Harland Clarke Holdings Corp. | 463.9 | 295.4 | 10.4% | 1.57x | 15.12x | 49.7% | 38.1% |
| 21-Oct-16 | 2-Dec-16 | Everyday Health, Inc. | Ziff Davis, LLC | 465.3 | 253.9 | 12.2% | 1.83x | 15.03x | 11.7% | 30.9% |
| 9-Aug-16 | 28-Oct-16 | Monster Worldwide, Inc. | Randstad North America, Inc. | 371.1 | 635.0 | 11.9% | 0.61x | 6.80x | 22.7% | 30.3% |
| 27-Jun-16 | 8-Aug-16 | ReachLocal, Inc. | Gannett Co., Inc. | 155.6 | 361.7 | -2.5% | 0.45x | na | 187.5% | 184.0% |
| 13-Jun-16 | 8-Dec-16 | LinkedIn Corporation | Microsoft Corporation | 25,984.4 | 3,615.0 | 13.2% | 7.19x | 54.43x | 49.5% | 54.3% |
| 5-May-16 | 17-Jun-16 | NextAdvisor, Inc. | Baton Holding, LLC | 106.7 | 70.3 | na | 1.52x | 7.25x | na | na |
| 12-Apr-16 | 12-Apr-16 | Cracked Entertainment, Inc. | Scripps Media, Inc. | 39.0 | 10.9 | na | 3.58x | na | na | na |
| 2-Nov-15 | 31-Dec-15 | Vetstreet Inc. | Butler Schein Animal Health | 48.0 | 43.0 | na | 1.12x | na | na | na |
| 28-Oct-15 | 29-Jan-16 | The Weather Company | International Business Machines | 2,284.0 | na | na | na | na | na | na |
| | | | <i>Mean</i> | \$ 2,881.2 | \$ 615.8 | 11.7% | 2.41x | 36.04x | 49.4% | 53.8% |
| | | | <i>Median</i> | \$ 464.6 | \$ 302.3 | 12.1% | 1.83x | 14.67x | 33.7% | 34.8% |
| Internet Retail | | | | | | | | | | |
| 25-Nov-19 | na | StubHub, Inc. | viagogo AG | \$ 4,050.0 | na | na | na | na | na | na |
| 10-Jun-19 | 25-Sep-19 | Shutterfly, Inc. | Apollo Global Management, LLC | 2,801.4 | 2,116.8 | 10.4% | 1.32x | 12.70x | 4.2% | 15.7% |
| 24-Dec-18 | 15-Feb-19 | MINDBODY, Inc. | Vista Equity Partners | 1,829.3 | 228.9 | -8.3% | 7.99x | na | 68.0% | 42.6% |
| 25-Sep-18 | 21-Dec-18 | XO Group Inc. | WeddingWire, Inc. | 804.4 | 164.7 | 14.1% | 4.88x | 34.74x | 26.6% | 13.8% |
| 7-Apr-17 | 5-May-17 | eBags, Inc. | Samsonite LLC | 105.0 | 158.5 | na | 0.66x | na | na | na |
| 7-Nov-16 | 17-Feb-17 | Blue Nile, Inc. | Bain Capital Private Equity | 456.2 | 471.9 | 3.5% | 0.97x | 27.82x | 33.9% | 15.1% |
| 8-Aug-16 | 19-Sep-16 | Jet.com, Inc. | Wal-Mart Stores, Inc. | 3,300.0 | na | na | na | na | na | na |
| 4-Nov-15 | 14-Dec-15 | HomeAway, Inc. | Expedia, Inc. (nka:Expedia Group, Inc.) | 3,057.6 | 485.3 | 12.6% | 6.30x | 49.81x | 24.3% | 41.8% |
| 7-Oct-15 | 31-Oct-15 | Ticketfly, LLC | Pandora Media, LLC | 321.9 | 65.9 | -17.0% | 4.88x | na | na | na |
| 17-Aug-15 | 30-Sep-15 | zulily, Inc. | QVC, Inc. | 2,180.0 | 1,281.4 | 2.2% | 1.70x | 77.32x | 49.2% | 34.6% |
| 29-May-15 | 17-Jul-15 | Geeknet, Inc. | GameStop Corp. | 102.7 | 137.1 | -6.0% | 0.75x | na | 5.5% | 125.5% |
| 27-May-15 | 13-Jul-15 | Orchard Brands Corporation | Bluestem Brands, Inc. | 410.0 | 1,020.0 | 6.9% | 0.40x | 5.80x | na | na |
| | | | <i>Mean</i> | \$ 1,618.2 | \$ 613.0 | 2.1% | 2.99x | 34.70x | 30.2% | 41.3% |
| | | | <i>Median</i> | \$ 1,316.9 | \$ 350.4 | 3.5% | 1.51x | 31.28x | 26.6% | 34.6% |

Sources of information: S&P Capital IQ.

PROFESSIONAL SERVICES AND DISTRIBUTION

Selected Transactions Review

(\$ in millions)

| Transaction | | | | Metrics | | | Valuation Benchmarks | | | |
|-----------------------------------|-----------|----------------------------------|-------------------------------------|------------------|-------------|----------|----------------------|--------|----------------------|---------|
| Date | | Target | Acquirer | Enterprise Value | Target TTM | | Implied EV / | | Stock Price Premiums | |
| Annc. | Closed | | | | Revenue | EBITDA % | Revenue | EBITDA | 1-Day | 1-Month |
| Consulting | | | | | | | | | | |
| 14-Aug-19 | 19-Dec-19 | Presidio, Inc. | BC Partners | \$ 2,456.5 | \$ 3,048.2 | 7.6% | 0.81x | 10.62x | 26.0% | 20.9% |
| 25-Jul-19 | na | Stratos Management Systems, Inc. | Pensare Acquisition Corp. | 54.2 | na | na | na | na | na | na |
| 18-Jan-19 | 25-Feb-19 | Fulcrum IT Services, LLC | Huntington Ingalls Industries, Inc. | 194.0 | na | na | na | na | na | na |
| 22-Jul-18 | 9-Oct-18 | Atos Syntel Inc. | Atos SE | 3,541.6 | 966.2 | 27.4% | 3.67x | 13.40x | 4.8% | 28.1% |
| 12-Feb-18 | 2-Apr-18 | CSRA Inc. | General Dynamics Corporation | 9,871.1 | 5,064.0 | 16.6% | 1.95x | 11.73x | 33.8% | 28.6% |
| 3-Jul-17 | 15-Aug-17 | NCI, Inc. | H.I.G. Capital | 285.1 | 325.4 | 9.1% | 0.88x | 9.61x | -5.2% | 2.6% |
| 27-Jan-17 | 28-Apr-17 | Harris Corpo, Gov (nka:Peraton) | Veritas Capital | 690.0 | 1,000.0 | na | 0.69x | na | na | na |
| 24-May-16 | 31-Mar-17 | HP Services | Computer Sciences Corp (nka:DXC) | 11,574.9 | 17,787.0 | 13.6% | 0.65x | 4.78x | na | na |
| 28-Mar-16 | 2-Nov-16 | Dell Services | NTT DATA Italia S.p.A. | 3,055.0 | 2,826.0 | na | 1.08x | na | na | na |
| 27-Apr-15 | 1-Jul-15 | iGATE Corporation | Capgemini North America, Inc. | 4,453.6 | 1,288.1 | 19.3% | 3.46x | 17.90x | 4.7% | 13.5% |
| 9-Mar-15 | 1-Apr-15 | Acentia, LLC | MAXIMUS Federal Services, Inc. | 300.7 | 193.2 | 11.4% | 1.56x | 13.67x | na | na |
| | | | <i>Mean</i> | \$ 3,316.1 | \$ 3,610.9 | 15.0% | 1.64x | 11.67x | 12.8% | 18.7% |
| | | | <i>Median</i> | \$ 2,456.5 | \$ 1,288.1 | 13.6% | 1.08x | 11.73x | 4.8% | 20.9% |
| Infrastructure Outsourcing | | | | | | | | | | |
| 7-Nov-16 | 27-Feb-17 | EarthLink Holdings Corp. | Windstream Holdings, Inc. | \$ 1,070.3 | \$ 959.9 | 20.6% | 1.12x | 5.40x | -4.8% | -5.7% |
| 7-Nov-16 | 6-Jan-17 | Datalink Corporation | Insight Enterprises, Inc. | 223.1 | 756.5 | 2.5% | 0.29x | 11.72x | 19.3% | 5.9% |
| 26-Aug-16 | 3-Nov-16 | Rackspace Hosting, Inc. | Apollo Global Mgt and Searchlight | 4,314.1 | 2,073.4 | 28.4% | 2.07x | 7.25x | 6.0% | 37.8% |
| 4-May-16 | 1-Jul-16 | United Online, Inc. | B. Riley Financial, Inc. | 43.8 | 145.3 | 10.4% | 0.31x | 3.71x | 1.9% | -2.7% |
| 19-Feb-15 | 1-Apr-15 | MegaPath Managed Services | Global Telecom & Tech Americas | 152.4 | 124.0 | 16.1% | 1.23x | 7.62x | na | na |
| | | | <i>Mean</i> | \$ 1,160.7 | \$ 811.8 | 15.6% | 1.00x | 7.14x | 5.6% | 8.8% |
| | | | <i>Median</i> | \$ 223.1 | \$ 756.5 | 16.1% | 1.12x | 7.25x | 3.9% | 1.6% |
| Distribution | | | | | | | | | | |
| 24-Dec-19 | na | Anixter International Inc. | WESCO International, Inc. | \$ 4,751.5 | \$ 8,712.4 | 4.9% | 0.55x | 11.08x | 14.4% | 16.1% |
| 6-Jun-17 | 1-Sep-17 | Westcon Group, Inc. | SYNNEX Corporation | 830.0 | 4,532.1 | 1.2% | 0.18x | 15.79x | na | na |
| 19-Sep-16 | 27-Feb-17 | Avnet Technology Solutions | Tech Data Corporation | 2,645.0 | 9,652.5 | na | 0.27x | na | na | na |
| 17-Feb-16 | 5-Dec-16 | Ingram Micro Inc. | Tianjin Tianhai (nka:HNA Tech) | 6,597.2 | 40,998.3 | 1.9% | 0.16x | 8.49x | 32.2% | 43.3% |
| | | | <i>Mean</i> | \$ 3,705.9 | \$ 15,973.8 | 2.7% | 0.29x | 11.79x | 23.3% | 29.7% |
| | | | <i>Median</i> | \$ 3,698.2 | \$ 9,182.5 | 1.9% | 0.23x | 11.08x | 23.3% | 29.7% |

Sources of information: S&P Capital IQ.

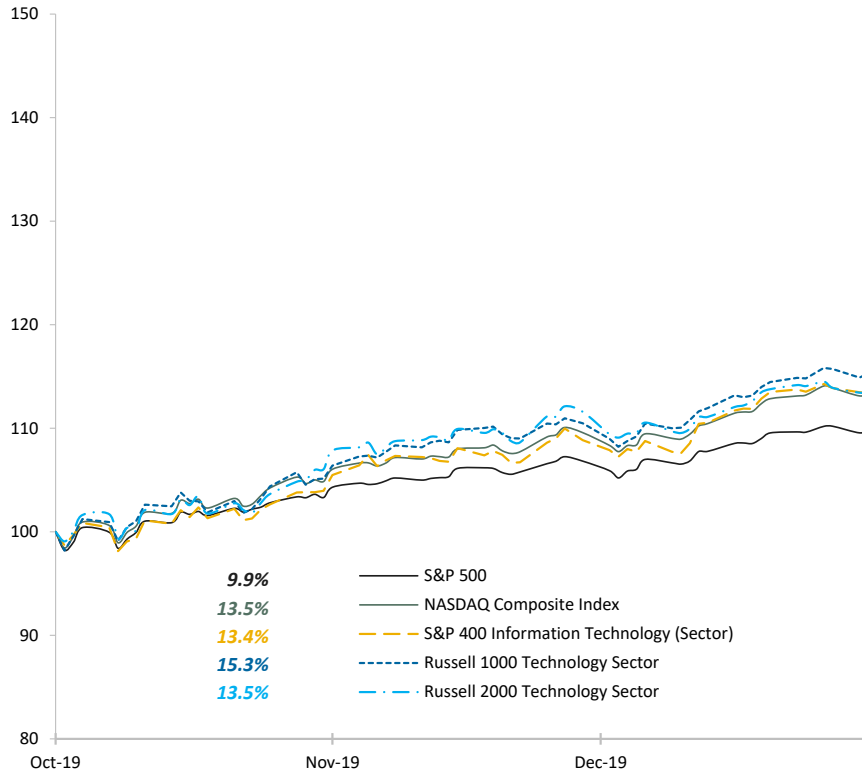
I Q4 TECHNOLOGY DEALS

II M&A TRANSACTIONS

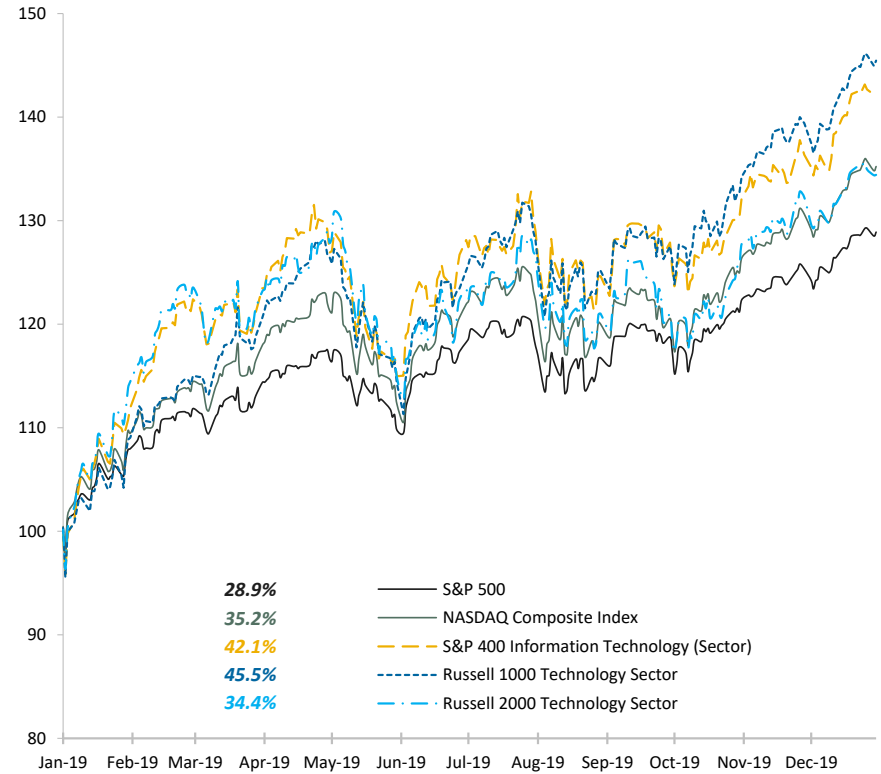
III PUBLIC MARKETS REVIEW

Relative Performance

Quarterly - October 1, 2019 to December 31, 2019



Annual - December 31, 2018 to December 31, 2019



Sources of information: S&P Capital IQ.

Selected Companies Review

(\$ in millions, except per security)

| Company | Ticker | Market Statistics | | | Metrics | | | Valuation Benchmarks | | | |
|---------------------------------|--------|-------------------|-----------------------|---------------------|--------------------|--------------|---------------|----------------------|---------------|--------------|--------------|
| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Large Diversified | | | | | | | | | | | |
| Adobe Inc. | ADBE | \$ 329.81 | 99.1% - 153.3% | \$ 159,041.5 | \$ 11,171.3 | 18.1% | 34.5% | 14.24x | 14.26x | 41.2x | 31.6x |
| Microsoft Corporation | MSFT | \$ 157.70 | 98.8% - 162.2% | 1,152,023.6 | 129,814.0 | 11.3% | 44.2% | 8.87x | 8.66x | 20.1x | 19.4x |
| Oracle Corporation | ORCL | \$ 52.75 | 87.2% - 118.8% | 200,085.3 | 39,583.0 | 2.1% | 40.9% | 5.05x | 5.05x | 12.4x | 10.8x |
| | | <i>Mean</i> | <i>95.0% - 144.8%</i> | <i>\$ 503,716.8</i> | <i>\$ 60,189.4</i> | <i>10.5%</i> | <i>39.9%</i> | <i>9.39x</i> | <i>9.32x</i> | <i>24.6x</i> | <i>20.6x</i> |
| | | <i>Median</i> | <i>98.8% - 153.3%</i> | <i>\$ 200,085.3</i> | <i>\$ 39,583.0</i> | <i>11.3%</i> | <i>40.9%</i> | <i>8.87x</i> | <i>8.66x</i> | <i>20.1x</i> | <i>19.4x</i> |
| Application Software | | | | | | | | | | | |
| Anaplan, Inc. | PLAN | \$ 52.40 | 86.8% - 220.4% | \$ 7,059.5 | \$ 319.0 | 32.7% | -39.4% | nm | nm | na | na |
| Avalara, Inc. | AVLR | \$ 73.25 | 77.7% - 238.8% | 5,189.1 | 351.7 | 25.2% | -11.9% | 14.75x | 13.84x | na | nm |
| DocuSign, Inc. | DOCU | \$ 74.11 | 97.2% - 191.0% | 13,691.9 | 898.8 | 25.5% | -18.7% | 15.23x | 14.18x | na | nm |
| Elastic N.V. | ESTC | \$ 64.30 | 61.8% - 107.0% | 5,367.4 | 342.3 | 39.6% | -37.2% | 15.68x | 14.17x | na | na |
| Intuit Inc. | INTU | \$ 261.42 | 88.4% - 138.9% | 66,998.0 | 6,933.0 | 10.1% | 30.0% | 9.66x | 9.42x | 32.2x | 26.6x |
| Manhattan Associates, Inc. | MANH | \$ 79.75 | 89.1% - 200.1% | 5,022.9 | 609.4 | 6.0% | 21.8% | 8.24x | 8.20x | 37.8x | 33.8x |
| Smartsheet Inc. | SMAR | \$ 44.92 | 80.5% - 201.8% | 4,976.1 | 244.5 | 39.2% | -30.4% | nm | 18.43x | na | na |
| SPS Commerce, Inc. | SPSC | \$ 55.42 | 93.7% - 138.9% | 1,781.2 | 271.6 | 10.1% | 18.8% | 6.56x | 6.38x | 34.8x | 25.8x |
| SVMK Inc. | SVMK | \$ 17.87 | 90.2% - 158.3% | 2,627.4 | 291.0 | 21.5% | -13.3% | 9.03x | 8.56x | na | nm |
| Workiva Inc. | WK | \$ 42.05 | 65.6% - 122.1% | 1,894.8 | 282.1 | 16.4% | -9.1% | 6.72x | 6.46x | na | na |
| | | <i>Mean</i> | <i>83.1% - 171.7%</i> | <i>\$ 11,460.8</i> | <i>\$ 1,054.3</i> | <i>22.6%</i> | <i>-8.9%</i> | <i>10.74x</i> | <i>11.07x</i> | <i>35.0x</i> | <i>28.7x</i> |
| | | <i>Median</i> | <i>87.6% - 174.6%</i> | <i>\$ 5,106.0</i> | <i>\$ 330.6</i> | <i>23.3%</i> | <i>-12.6%</i> | <i>9.35x</i> | <i>9.42x</i> | <i>34.8x</i> | <i>26.6x</i> |
| Human Capital Management | | | | | | | | | | | |
| Benefitfocus, Inc. | BNFT | \$ 21.94 | 36.2% - 114.0% | \$ 872.0 | \$ 283.3 | 14.4% | -6.9% | 3.08x | 2.95x | na | nm |
| Cornerstone OnDemand, Inc. | CSOD | \$ 58.55 | 93.4% - 121.4% | 3,636.5 | 565.2 | 14.1% | 3.0% | 6.43x | 6.34x | nm | 28.5x |
| Paycom Software, Inc. | PAYC | \$ 264.76 | 94.6% - 230.2% | 15,217.1 | 694.6 | 23.6% | 34.0% | nm | nm | nm | 48.8x |
| Paylocity Holding Corporation | PCTY | \$ 120.82 | 98.5% - 213.1% | 6,584.6 | 493.8 | 19.6% | 15.3% | 13.33x | 12.74x | nm | 45.0x |
| Workday, Inc. | WDAY | \$ 164.45 | 72.5% - 108.9% | 37,830.5 | 3,439.5 | 20.4% | -5.5% | 11.00x | 10.46x | na | nm |
| | | <i>Mean</i> | <i>79.0% - 157.5%</i> | <i>\$ 12,828.1</i> | <i>\$ 1,095.3</i> | <i>18.4%</i> | <i>8.0%</i> | <i>8.46x</i> | <i>8.12x</i> | <i>na</i> | <i>40.8x</i> |
| | | <i>Median</i> | <i>93.4% - 121.4%</i> | <i>\$ 6,584.6</i> | <i>\$ 565.2</i> | <i>19.6%</i> | <i>3.0%</i> | <i>8.72x</i> | <i>8.40x</i> | <i>na</i> | <i>45.0x</i> |

Market value equals price per share times number of diluted shares outstanding. Enterprise value equals market value plus debt, preferred stock, and non controlling interests, less cash.

Sources of information: S&P Capital IQ.

Selected Companies Review

(\$ in millions, except per security)

| Company | Ticker | Market Statistics | | | Metrics | | | Valuation Benchmarks | | | |
|---|--------|-------------------|----------------|-------------|------------|-------------|------------|----------------------|--------|-------------|--------|
| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Sales, Marketing, and Customer Service | | | | | | | | | | | |
| HubSpot, Inc. | HUBS | \$ 158.50 | 76.2% - 134.6% | \$ 6,642.1 | \$ 632.7 | 23.8% | -5.1% | 10.50x | 9.92x | na | nm |
| LivePerson, Inc. | LPSN | \$ 37.00 | 86.3% - 208.1% | 2,410.9 | 278.3 | 20.7% | -15.6% | 8.66x | 8.27x | na | na |
| salesforce.com, inc. | CRM | \$ 162.64 | 97.1% - 125.0% | 145,849.8 | 15,850.0 | 23.0% | 14.5% | 9.20x | 8.58x | nm | 29.7x |
| ServiceSource International, Inc. | SREV | \$ 1.67 | 93.8% - 240.0% | 180.4 | 222.7 | -5.0% | -1.4% | 0.81x | 0.84x | na | nm |
| Shopify Inc. | SHOP | \$ 397.58 | 95.4% - 307.1% | 44,499.5 | 1,416.9 | 36.1% | -6.7% | nm | nm | na | nm |
| Yext, Inc. | YEXT | \$ 14.42 | 61.8% - 112.4% | 1,613.6 | 281.2 | 27.9% | -34.6% | 5.74x | 5.42x | na | na |
| Zendesk, Inc. | ZEN | \$ 76.63 | 80.8% - 138.5% | 8,982.4 | 758.8 | 29.9% | -17.0% | 11.84x | 11.03x | na | nm |
| | | <i>Mean</i> | 84.5% - 180.8% | \$ 30,025.5 | \$ 2,777.2 | 22.3% | -9.4% | 7.79x | 7.34x | na | 29.7x |
| | | <i>Median</i> | 86.3% - 138.5% | \$ 6,642.1 | \$ 632.7 | 23.8% | -6.7% | 8.93x | 8.43x | na | 29.7x |
| Business Analytics | | | | | | | | | | | |
| Alteryx, Inc. | AYX | \$ 100.07 | 67.7% - 177.9% | \$ 6,584.7 | \$ 350.6 | 32.5% | 7.5% | 18.78x | 16.81x | nm | nm |
| Cloudera, Inc. | CLDR | \$ 11.63 | 75.4% - 237.8% | 3,272.3 | 727.0 | 10.7% | -31.2% | 4.50x | 4.17x | na | nm |
| MicroStrategy Incorporated | MSTR | \$ 142.63 | 89.8% - 118.4% | 1,000.7 | 484.7 | 7.8% | -0.2% | 2.06x | 2.07x | na | 21.7x |
| GlobalData Plc | DATA | \$ 17.08 | 96.3% - 223.7% | 2,139.9 | 217.4 | 5.4% | 17.8% | 9.84x | 9.13x | nm | 38.0x |
| Teradata Corporation | TDC | \$ 26.77 | 54.2% - 112.9% | 3,158.6 | 1,993.0 | 0.5% | 7.9% | 1.58x | 1.68x | 20.1x | 9.8x |
| | | <i>Mean</i> | 76.7% - 174.1% | \$ 3,231.2 | \$ 754.5 | 11.4% | 0.4% | 7.36x | 6.77x | 20.1x | 23.2x |
| | | <i>Median</i> | 75.4% - 177.9% | \$ 3,158.6 | \$ 484.7 | 7.8% | 7.5% | 4.50x | 4.17x | 20.1x | 21.7x |
| Design and Engineering | | | | | | | | | | | |
| ANSYS, Inc. | ANSS | \$ 257.41 | 99.0% - 187.7% | \$ 21,670.7 | \$ 1,445.1 | 11.3% | 39.4% | 15.00x | 14.40x | 38.0x | 32.2x |
| Autodesk, Inc. | ADSK | \$ 183.46 | 98.8% - 151.5% | 41,416.7 | 3,112.3 | 21.7% | 12.3% | 13.31x | 12.68x | nm | 47.2x |
| Cadence Design Systems, Inc. | CDNS | \$ 69.36 | 90.0% - 167.4% | 19,483.0 | 2,306.6 | 7.1% | 27.3% | 8.45x | 8.35x | 30.9x | 23.3x |
| PTC Inc. | PTC | \$ 74.89 | 73.1% - 120.7% | 9,020.9 | 1,255.6 | 14.5% | 13.2% | 7.18x | 6.85x | nm | 22.2x |
| Synopsys, Inc. | SNPS | \$ 139.20 | 94.9% - 171.8% | 20,639.3 | 3,360.7 | 11.6% | 20.6% | 6.14x | 6.14x | 29.8x | 22.6x |
| | | <i>Mean</i> | 91.1% - 159.8% | \$ 22,446.1 | \$ 2,296.1 | 13.2% | 22.6% | 10.02x | 9.68x | 32.9x | 29.5x |
| | | <i>Median</i> | 94.9% - 167.4% | \$ 20,639.3 | \$ 2,306.6 | 11.6% | 20.6% | 8.45x | 8.35x | 30.9x | 23.3x |

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| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Infrastructure | | | | | | | | | | | |
| Appian Corporation | APPN | \$ 38.21 | 60.7% - 151.5% | \$ 2,493.8 | \$ 256.1 | 16.1% | -18.2% | 9.74x | 9.39x | na | na |
| Carrefour SA | CA | \$ 16.78 | 82.3% - 103.2% | 34,134.5 | 87,812.9 | 2.9% | 4.4% | 0.39x | 0.41x | 8.8x | 7.0x |
| Carbacid Investments plc | CARB | \$ 0.08 | 74.8% - 112.7% | 12.8 | 6.1 | na | 44.0% | 2.12x | na | 4.8x | na |
| Citrix Systems, Inc. | CTXS | \$ 110.90 | 96.7% - 122.8% | 15,665.7 | 3,002.6 | 3.4% | 24.9% | 5.22x | 5.22x | 20.9x | 14.7x |
| Commvault Systems, Inc. | CVLT | \$ 44.64 | 64.5% - 109.6% | 1,583.6 | 695.5 | 1.7% | 7.2% | 2.28x | 2.32x | 31.7x | 14.7x |
| Domo, Inc. | DOMO | \$ 21.72 | 46.1% - 146.8% | 589.9 | 166.6 | 14.2% | -67.4% | 3.54x | 3.41x | na | na |
| MongoDB, Inc. | MDB | \$ 131.61 | 71.2% - 186.3% | 7,943.7 | 383.7 | 28.9% | -32.1% | nm | 19.43x | na | na |
| Progress Software Corporation | PRGS | \$ 41.55 | 87.3% - 130.5% | 2,014.0 | 412.5 | 2.0% | 33.1% | 4.88x | 4.72x | 14.7x | 12.0x |
| SolarWinds Corporation | SWI | \$ 18.55 | 87.4% - 146.5% | 7,404.7 | 906.2 | 11.6% | 24.2% | 8.17x | 7.87x | 33.8x | 16.4x |
| Splunk Inc. | SPLK | \$ 149.77 | 97.5% - 150.5% | 23,573.4 | 2,189.8 | 22.5% | -8.5% | 10.76x | 10.03x | na | nm |
| Twilio Inc. | TWLO | \$ 98.28 | 65.1% - 122.7% | 12,626.6 | 1,007.5 | 31.5% | -22.5% | 12.53x | 11.31x | na | nm |
| Varonis Systems, Inc. | VRNS | \$ 77.71 | 97.1% - 159.7% | 2,332.9 | 269.1 | 10.8% | -19.1% | 8.67x | 9.20x | na | na |
| VMware, Inc. | VMW | \$ 151.79 | 73.4% - 118.0% | 65,940.6 | 9,752.0 | 11.7% | 25.4% | 6.76x | 6.52x | 26.6x | 16.8x |
| | | | <i>Mean</i> | \$ 13,562.8 | \$ 8,220.1 | 13.1% | -0.4% | 6.26x | 7.49x | 20.2x | 13.6x |
| | | | <i>Median</i> | \$ 7,404.7 | \$ 695.5 | 11.7% | 4.4% | 5.99x | 7.20x | 20.9x | 14.7x |
| Collaboration | | | | | | | | | | | |
| Box, Inc. | BOX | \$ 16.78 | 67.3% - 134.7% | \$ 2,735.5 | \$ 676.4 | 11.5% | -11.7% | 4.04x | 3.94x | na | 47.0x |
| Dropbox, Inc. | DBX | \$ 17.91 | 67.6% - 111.4% | 7,310.9 | 1,591.2 | 14.7% | 5.8% | 4.59x | 4.41x | nm | 19.6x |
| LogMeIn, Inc. | LOGM | \$ 85.74 | 88.5% - 138.2% | 4,355.3 | 1,247.9 | 4.6% | 25.5% | 3.49x | 3.46x | 13.7x | 10.6x |
| RingCentral, Inc. | RNG | \$ 168.67 | 94.8% - 217.9% | 14,366.6 | 838.6 | 23.1% | 1.0% | 17.13x | 16.15x | nm | nm |
| Workiva Inc. | WK | \$ 42.05 | 65.6% - 122.1% | 1,894.8 | 282.1 | 16.4% | -9.1% | 6.72x | 6.46x | na | na |
| | | | <i>Mean</i> | \$ 6,132.6 | \$ 927.2 | 14.1% | 2.3% | 7.20x | 6.88x | 13.7x | 25.7x |
| | | | <i>Median</i> | \$ 4,355.3 | \$ 838.6 | 14.7% | 1.0% | 4.59x | 4.41x | 13.7x | 19.6x |

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|-------------------------------------|--------|-------------------|-----------------------|-------------------|-------------------|--------------|--------------|----------------------|--------------|--------------|--------------|
| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Healthcare | | | | | | | | | | | |
| Cerner Corporation | CERN | \$ 73.39 | 96.0% - 145.3% | \$ 23,790.6 | \$ 5,616.0 | 4.1% | 19.8% | 4.24x | 4.18x | 21.4x | 14.4x |
| Computer Programs and Systems, Inc. | CPSI | \$ 26.40 | 77.6% - 127.4% | 490.1 | 276.3 | 2.7% | 12.7% | 1.77x | 1.79x | 14.0x | 10.0x |
| HealthStream, Inc. | HSTM | \$ 27.20 | 90.7% - 115.2% | 742.2 | 251.2 | -1.8% | 12.5% | 2.95x | 2.92x | 23.6x | 16.3x |
| Inovalon Holdings, Inc. | INOV | \$ 18.82 | 99.8% - 163.7% | 3,852.3 | 605.2 | 10.2% | 27.2% | 6.36x | 6.01x | 23.4x | 18.1x |
| NantHealth, Inc. | NH | \$ 1.03 | 52.6% - 228.9% | 323.5 | 94.6 | 7.1% | -23.7% | 3.42x | 3.40x | na | na |
| NextGen Healthcare, Inc. | NXGN | \$ 16.07 | 76.1% - 118.2% | 1,061.8 | 531.8 | 4.8% | 7.4% | 2.00x | 1.98x | 27.0x | 11.7x |
| Veeva Systems Inc. | VEEV | \$ 140.66 | 79.5% - 170.7% | 20,335.7 | 1,024.9 | 27.2% | 30.2% | 19.84x | 18.65x | nm | 47.5x |
| | | <i>Mean</i> | <i>81.7% - 152.8%</i> | <i>\$ 7,228.0</i> | <i>\$ 1,200.0</i> | <i>7.7%</i> | <i>12.3%</i> | <i>5.80x</i> | <i>5.56x</i> | <i>21.9x</i> | <i>19.7x</i> |
| | | <i>Median</i> | <i>79.5% - 145.3%</i> | <i>\$ 1,061.8</i> | <i>\$ 531.8</i> | <i>4.8%</i> | <i>12.7%</i> | <i>3.42x</i> | <i>3.40x</i> | <i>23.4x</i> | <i>15.3x</i> |
| Other Vertical | | | | | | | | | | | |
| AppFolio, Inc. | APPF | \$ 109.95 | 94.0% - 199.9% | \$ 3,881.5 | \$ 239.0 | 27.1% | 7.4% | 16.24x | 15.21x | nm | nm |
| Blackbaud, Inc. | BLKB | \$ 79.60 | 81.8% - 132.7% | 4,414.0 | 883.8 | 4.7% | 12.9% | 4.99x | 4.92x | 38.8x | 24.3x |
| CDK Global, Inc. | CDK | \$ 54.68 | 85.6% - 131.8% | 9,333.9 | 1,963.1 | -0.7% | 35.5% | 4.75x | 4.49x | 13.4x | 11.8x |
| Ebix, Inc. | EBIX | \$ 33.41 | 52.3% - 107.6% | 1,712.4 | 570.8 | 21.1% | 27.8% | 3.00x | 2.91x | 10.8x | 9.5x |
| Guidewire Software, Inc. | GWRE | \$ 109.77 | 88.8% - 143.8% | 8,487.7 | 696.3 | 18.7% | 2.1% | 12.19x | 12.28x | nm | nm |
| Instructure, Inc. | INST | \$ 48.21 | 88.8% - 132.1% | 1,787.6 | 245.5 | 17.8% | -24.1% | 7.28x | 6.94x | na | na |
| Q2 Holdings, Inc. | QTWO | \$ 81.08 | 86.6% - 175.8% | 3,854.4 | 295.8 | 30.5% | -10.3% | 13.03x | 12.14x | na | nm |
| Square, Inc. | SQ | \$ 62.56 | 75.2% - 119.7% | 28,059.0 | 4,332.6 | 27.6% | 1.8% | 6.48x | 12.57x | nm | nm |
| SS&C Technologies Holdings, Inc. | SSNC | \$ 61.40 | 90.7% - 144.4% | 24,016.8 | 4,540.4 | 3.3% | 37.0% | 5.29x | 5.19x | 14.3x | 13.3x |
| Tyler Technologies, Inc. | TYL | \$ 300.02 | 99.5% - 170.2% | 11,997.4 | 1,039.6 | 10.8% | 18.8% | 11.54x | 10.99x | nm | 39.7x |
| Zuora, Inc. | ZUO | \$ 14.33 | 58.1% - 109.9% | 1,572.6 | 269.2 | 17.4% | -28.7% | 5.84x | 5.66x | na | na |
| | | <i>Mean</i> | <i>81.9% - 142.5%</i> | <i>\$ 9,010.7</i> | <i>\$ 1,370.6</i> | <i>16.2%</i> | <i>7.3%</i> | <i>8.24x</i> | <i>8.48x</i> | <i>19.3x</i> | <i>19.7x</i> |
| | | <i>Median</i> | <i>86.6% - 132.7%</i> | <i>\$ 4,414.0</i> | <i>\$ 696.3</i> | <i>17.8%</i> | <i>7.4%</i> | <i>6.48x</i> | <i>6.94x</i> | <i>13.8x</i> | <i>13.3x</i> |

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| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E | |
| Cyber Security | | | | | | | | | | | | |
| Check Point Software Technologies Ltd. | CHKP | \$ 110.96 | 83.6% - 110.3% | \$ 15,302.6 | \$ 1,976.4 | 3.0% | 45.5% | 7.74x | 7.68x | 17.0x | 15.0x | |
| FireEye, Inc. | FEYE | \$ 16.53 | 88.6% - 130.6% | 3,635.2 | 871.6 | 8.0% | -13.8% | 4.17x | 4.13x | na | 33.7x | |
| Forescout Technologies, Inc. | FSCT | \$ 32.80 | 70.6% - 137.0% | 1,582.0 | 330.2 | 13.5% | -25.8% | 4.79x | 4.65x | na | na | |
| Fortinet, Inc. | FTNT | \$ 106.76 | 96.8% - 164.1% | 16,470.5 | 2,048.8 | 15.2% | 18.1% | 8.04x | 7.68x | 44.3x | 28.3x | |
| MobileIron, Inc. | MOBL | \$ 4.86 | 62.4% - 110.7% | 463.7 | 205.3 | 5.9% | -20.0% | 2.26x | 2.25x | na | na | |
| Okta, Inc. | OKTA | \$ 115.37 | 81.3% - 194.6% | 14,681.3 | 534.2 | 31.5% | -29.8% | 27.48x | 25.55x | na | na | |
| OneSpan Inc. | OSPN | \$ 17.12 | 79.2% - 138.1% | 617.0 | 248.4 | 5.8% | 8.1% | 2.48x | 2.47x | 30.8x | 22.3x | |
| Palo Alto Networks, Inc. | PANW | \$ 231.25 | 88.7% - 129.3% | 21,713.4 | 3,015.5 | 20.4% | 3.0% | 7.20x | 6.90x | nm | 29.4x | |
| Proofpoint, Inc. | PFPT | \$ 114.78 | 85.9% - 141.6% | 6,330.7 | 843.2 | 19.9% | -2.9% | 7.51x | 7.16x | na | 41.2x | |
| Qualys, Inc. | QLYS | \$ 83.37 | 85.8% - 120.2% | 3,109.2 | 311.1 | 14.1% | 30.7% | 9.99x | 9.67x | 32.6x | 22.5x | |
| Rapid7, Inc. | RPD | \$ 56.02 | 84.9% - 190.0% | 2,895.3 | 304.1 | 23.1% | -9.2% | 9.52x | 8.95x | na | nm | |
| SailPoint Technologies Holdings, Inc. | SAIL | \$ 23.60 | 73.2% - 141.9% | 2,007.1 | 280.1 | 15.3% | 3.9% | 7.17x | 7.04x | nm | nm | |
| SecureWorks Corp. | SCWX | \$ 16.66 | 66.9% - 160.7% | 1,247.7 | 541.5 | 5.5% | -1.4% | 2.30x | 2.27x | na | nm | |
| Symphony Communication Public Company Limi | SYMC | \$ 0.10 | 56.6% - 106.4% | 74.3 | 43.1 | na | 44.1% | 1.72x | na | 3.9x | na | |
| Tenable Holdings, Inc. | TENB | \$ 23.96 | 66.1% - 118.1% | 2,215.2 | 332.8 | 23.8% | -23.2% | 6.66x | 6.30x | na | na | |
| Zscaler, Inc. | ZS | \$ 46.50 | 51.9% - 122.3% | 5,742.0 | 333.1 | 31.0% | -6.4% | 17.24x | 16.04x | na | nm | |
| | | | <i>Mean</i> | 76.4% - 138.5% | \$ 6,130.5 | \$ 763.7 | 15.7% | 1.3% | 7.89x | 7.92x | 25.7x | 27.5x |
| | | | <i>Median</i> | 80.3% - 133.8% | \$ 3,002.3 | \$ 332.9 | 15.2% | -2.2% | 7.18x | 7.04x | 30.8x | 28.3x |

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| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Large Diversified | | | | | | | | | | | |
| Apple Inc. | AAPL | \$ 293.65 | 99.9% - 206.8% | \$ 1,312,254.8 | \$ 260,174.0 | 6.9% | 29.4% | 5.04x | 4.97x | 17.2x | 17.1x |
| Hewlett Packard Enterprise Company | HPE | \$ 15.86 | 90.2% - 126.7% | 30,718.1 | 29,135.0 | 1.5% | 18.7% | 1.05x | 1.07x | 5.6x | 5.9x |
| HP Inc. | HPQ | \$ 20.55 | 85.3% - 129.0% | 30,493.8 | 58,756.0 | -0.5% | 8.5% | 0.52x | 0.52x | 6.1x | 6.0x |
| International Business Machines Corporation | IBM | \$ 134.04 | 87.6% - 120.0% | 179,516.8 | 77,131.0 | 3.2% | 21.6% | 2.33x | 2.33x | 10.8x | 9.9x |
| Oracle Corporation | ORCL | \$ 52.75 | 87.2% - 118.8% | 200,085.3 | 39,583.0 | 2.1% | 40.9% | 5.05x | 5.05x | 12.4x | 10.8x |
| | | <i>Mean</i> | 90.0% - 140.3% | \$ 350,613.8 | \$ 92,955.8 | 2.6% | 23.8% | 2.80x | 2.79x | 10.4x | 9.9x |
| | | <i>Median</i> | 87.6% - 126.7% | \$ 179,516.8 | \$ 58,756.0 | 2.1% | 21.6% | 2.33x | 2.33x | 10.8x | 9.9x |
| Networking | | | | | | | | | | | |
| A10 Networks, Inc. | ATEN | \$ 6.87 | 82.9% - 115.9% | \$ 415.1 | \$ 214.1 | 7.9% | -4.8% | 1.94x | 1.97x | na | na |
| Arista Networks, Inc. | ANET | \$ 203.40 | 61.4% - 117.4% | 13,670.0 | 2,453.9 | -0.7% | 34.9% | 5.57x | 5.68x | 15.9x | 14.4x |
| Cisco Systems, Inc. | CSCO | \$ 47.61 | 81.7% - 116.2% | 195,066.9 | 51,991.0 | -0.2% | 31.2% | 3.75x | 3.79x | 12.0x | 10.4x |
| Extreme Networks, Inc. | EXTR | \$ 7.37 | 85.8% - 137.2% | 1,190.4 | 1,011.4 | 8.1% | 4.3% | 1.18x | 1.15x | 27.3x | na |
| F5 Networks, Inc. | FFIV | \$ 139.65 | 80.5% - 115.1% | 7,522.0 | 2,242.4 | 4.4% | 26.5% | 3.35x | 3.32x | 12.7x | 9.1x |
| Juniper Networks, Inc. | JNPR | \$ 24.63 | 85.6% - 109.9% | 7,887.1 | 4,418.3 | 1.7% | 16.1% | 1.79x | 1.78x | 11.1x | 8.4x |
| NETGEAR, Inc. | NTGR | \$ 24.51 | 60.3% - 103.5% | 608.9 | 1,034.7 | 3.2% | 6.4% | 0.59x | 0.61x | 9.2x | 7.8x |
| NetScout Systems, Inc. | NTCT | \$ 24.07 | 79.4% - 114.9% | 2,029.8 | 883.5 | 4.0% | 14.9% | 2.30x | 2.29x | 15.4x | na |
| | | <i>Mean</i> | 77.2% - 116.3% | \$ 28,548.8 | \$ 8,031.2 | 3.6% | 16.2% | 2.56x | 2.57x | 14.8x | 10.0x |
| | | <i>Median</i> | 81.1% - 115.5% | \$ 4,775.9 | \$ 1,638.6 | 3.6% | 15.5% | 2.12x | 2.13x | 12.7x | 9.1x |
| Storage | | | | | | | | | | | |
| NetApp, Inc. | NTAP | \$ 61.77 | 78.8% - 138.7% | \$ 13,005.1 | \$ 5,762.0 | 3.1% | 20.2% | 2.26x | 2.30x | 11.2x | 9.5x |
| Pure Storage, Inc. | PSTG | \$ 17.11 | 72.7% - 135.0% | 4,050.5 | 1,573.7 | 18.0% | -8.7% | 2.57x | 2.47x | na | 28.2x |
| Quantum Health Group Limited | QTM | \$ 0.03 | 95.1% - 260.0% | 39.5 | 41.4 | na | 6.7% | 0.95x | na | 14.1x | na |
| | | <i>Mean</i> | 82.2% - 177.9% | \$ 5,698.3 | \$ 2,459.0 | 10.5% | 6.1% | 1.93x | 2.38x | 12.7x | 18.8x |
| | | <i>Median</i> | 78.8% - 138.7% | \$ 4,050.5 | \$ 1,573.7 | 10.5% | 6.7% | 2.26x | 2.38x | 12.7x | 18.8x |

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(\$ in millions, except per security)

| Company | Ticker | Market Statistics | | | Metrics | | | Valuation Benchmarks | | | |
|---------------------------|--------|-------------------|-----------------------|--------------------|--------------------|--------------|-------------|----------------------|--------------|--------------|--------------|
| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Internet Retail | | | | | | | | | | | |
| Amazon.com, Inc. | AMZN | \$ 1,847.84 | 90.8% - 126.5% | \$ 947,343.9 | \$ 265,469.0 | 18.6% | 12.9% | 3.57x | 3.39x | 27.7x | 22.8x |
| Blue Apron Holdings, Inc. | APRN | \$ 6.58 | 26.7% - 107.9% | 155.4 | 501.3 | -0.9% | -3.4% | 0.31x | 0.34x | na | na |
| Booking Holdings Inc. | BKNG | \$ 2,053.73 | 98.6% - 125.5% | 87,673.5 | 14,940.0 | 7.7% | 38.8% | 5.87x | 5.84x | 15.1x | 15.0x |
| CarGurus, Inc. | CARG | \$ 35.18 | 77.7% - 122.8% | 3,890.8 | 556.9 | 21.0% | 6.2% | 6.99x | 6.65x | nm | nm |
| eBay Inc. | EBAY | \$ 36.11 | 86.0% - 131.0% | 34,702.4 | 10,856.0 | 1.8% | 28.7% | 3.20x | 3.22x | 11.2x | 9.4x |
| Etsy, Inc. | ETSY | \$ 44.30 | 60.4% - 111.4% | 5,379.4 | 748.4 | 26.2% | 17.4% | 7.19x | 6.62x | 41.2x | 29.2x |
| Eventbrite, Inc. | EB | \$ 20.17 | 61.4% - 131.8% | 1,382.0 | 320.1 | 13.3% | -14.4% | 4.32x | 4.28x | na | na |
| EverQuote, Inc. | EVER | \$ 34.35 | 89.4% - 831.7% | 912.2 | 214.8 | 26.5% | -5.9% | 4.25x | 3.75x | na | nm |
| Expedia Group, Inc. | EXPE | \$ 108.14 | 75.1% - 115.6% | 18,408.7 | 11,879.0 | 8.3% | 11.8% | 1.55x | 1.52x | 13.1x | 8.7x |
| Groupon, Inc. | GRPN | \$ 2.39 | 60.1% - 110.1% | 1,161.4 | 2,406.5 | 0.3% | 4.9% | 0.48x | 0.50x | 9.8x | 4.6x |
| Grubhub Inc. | GRUB | \$ 48.64 | 55.3% - 151.5% | 4,673.6 | 1,258.6 | 12.3% | 8.0% | 3.71x | 3.61x | 46.3x | 26.0x |
| Match Group, Inc. | MTCH | \$ 82.11 | 86.1% - 202.9% | 24,628.5 | 1,961.4 | 17.6% | 33.3% | 12.56x | 11.97x | 37.7x | 31.7x |
| Netflix, Inc. | NFLX | \$ 323.57 | 83.8% - 128.3% | 155,203.8 | 18,875.9 | 21.3% | 13.0% | 8.22x | 7.71x | nm | 49.3x |
| Overstock.com, Inc. | OSTK | \$ 7.05 | 23.7% - 107.3% | 303.5 | 1,541.1 | 0.9% | -7.2% | 0.20x | 0.21x | na | na |
| Stitch Fix, Inc. | SFIX | \$ 25.66 | 68.0% - 155.0% | 2,504.4 | 1,656.1 | 20.9% | 1.7% | 1.51x | 1.44x | nm | nm |
| TripAdvisor, Inc. | TRIP | \$ 30.38 | 49.9% - 109.8% | 3,470.7 | 1,571.0 | 4.4% | 15.5% | 2.21x | 2.22x | 14.2x | 8.0x |
| Wayfair Inc. | W | \$ 90.37 | 52.0% - 115.0% | 9,455.0 | 8,607.6 | 27.9% | -7.4% | 1.10x | 1.04x | na | na |
| | | <i>Mean</i> | <i>67.4% - 169.7%</i> | <i>\$ 76,544.1</i> | <i>\$ 20,197.9</i> | <i>13.4%</i> | <i>9.1%</i> | <i>3.95x</i> | <i>3.78x</i> | <i>24.0x</i> | <i>20.5x</i> |
| | | <i>Median</i> | <i>68.0% - 125.5%</i> | <i>\$ 4,673.6</i> | <i>\$ 1,656.1</i> | <i>13.3%</i> | <i>8.0%</i> | <i>3.57x</i> | <i>3.39x</i> | <i>15.1x</i> | <i>18.9x</i> |

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(\$ in millions, except per security)

| Company | Ticker | Market Statistics | | | Metrics | | | Valuation Benchmarks | | | |
|------------------------------------|--------|-------------------|----------------|--------------|--------------|-------------|------------|----------------------|--------|-------------|--------|
| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Internet Content and Search | | | | | | | | | | | |
| Alphabet Inc. | GOOG.L | \$ 1,339.39 | 98.0% - 131.0% | \$ 816,642.3 | \$ 155,058.0 | 17.8% | 28.4% | 5.27x | 5.02x | 18.5x | 13.8x |
| AutoWeb, Inc. | AUTO | \$ 2.47 | 49.4% - 129.3% | 35.5 | 119.6 | 8.6% | -9.2% | 0.30x | 0.30x | na | na |
| Care.com, Inc. | CRCM | \$ 15.03 | 58.2% - 197.5% | 471.8 | 207.4 | 7.3% | 4.9% | 2.27x | 2.26x | 46.8x | 21.7x |
| CoStar Group, Inc. | CSGP | \$ 598.30 | 93.6% - 184.1% | 20,747.0 | 1,340.6 | 19.1% | 33.1% | 15.48x | 14.93x | 46.8x | 41.6x |
| Facebook, Inc. | FB | \$ 205.25 | 98.2% - 159.7% | 542,401.7 | 66,529.0 | 21.8% | 42.8% | 8.15x | 7.70x | 19.1x | 14.4x |
| Snap Inc. | SNAP | \$ 16.33 | 88.9% - 305.2% | 21,815.7 | 1,544.5 | 36.5% | -62.0% | 14.13x | 12.71x | na | na |
| TechTarget, Inc. | TTGT | \$ 26.10 | 87.0% - 225.0% | 735.1 | 129.9 | 9.7% | 20.3% | 5.66x | 5.50x | 27.8x | 17.7x |
| TripAdvisor, Inc. | TRIP | \$ 30.38 | 49.9% - 109.8% | 3,470.7 | 1,571.0 | 4.4% | 15.5% | 2.21x | 2.22x | 14.2x | 8.0x |
| Twitter, Inc. | TWTR | \$ 32.05 | 69.9% - 115.0% | 21,644.3 | 3,360.8 | 14.8% | 23.0% | 6.44x | 6.28x | 28.0x | 17.6x |
| Yelp Inc. | YELP | \$ 34.83 | 85.0% - 115.6% | 2,374.9 | 989.1 | 11.8% | 6.0% | 2.40x | 2.33x | 39.8x | 10.9x |
| Yext, Inc. | YEXT | \$ 14.42 | 61.8% - 112.4% | 1,613.6 | 281.2 | 27.9% | -34.6% | 5.74x | 5.42x | na | na |
| Zillow Group, Inc. | ZG | \$ 45.74 | 89.7% - 162.7% | 9,893.3 | 2,164.2 | 74.5% | -6.2% | 4.57x | 3.79x | na | nm |
| | | <i>Mean</i> | 77.5% - 162.3% | \$ 120,153.8 | \$ 19,441.3 | 21.2% | 5.2% | 6.05x | 5.70x | 30.1x | 18.2x |
| | | <i>Median</i> | 86.0% - 145.3% | \$ 6,682.0 | \$ 1,442.5 | 16.3% | 10.8% | 5.46x | 5.22x | 27.9x | 16.0x |

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|--|--------|-------------------|-----------------------|-------------------|-------------------|--------------|--------------|----------------------|--------------|--------------|--------------|
| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Large Diversified | | | | | | | | | | | |
| International Business Machines Corporation | IBM | \$ 134.04 | 87.6% - 120.0% | \$ 179,516.8 | \$ 77,131.0 | 3.2% | 21.6% | 2.33x | 2.33x | 10.8x | 9.9x |
| Consulting | | | | | | | | | | | |
| CACI International Inc | CACI | \$ 249.99 | 98.9% - 179.6% | \$ 8,188.2 | \$ 5,183.9 | 8.8% | 9.4% | 1.58x | 1.52x | 16.8x | 16.7x |
| Cognizant Technology Solutions Corporation | CTSH | \$ 62.02 | 82.9% - 109.3% | 32,583.0 | 16,628.0 | 3.4% | 19.1% | 1.96x | 1.95x | 10.3x | 10.3x |
| DXC Technology Company | DXC | \$ 37.59 | 54.1% - 144.5% | 17,874.7 | 20,199.0 | -3.3% | 18.4% | 0.88x | 0.90x | 4.8x | 4.7x |
| EPAM Systems, Inc. | EPAM | \$ 212.16 | 97.8% - 190.4% | 11,578.3 | 2,166.0 | 22.5% | 15.7% | 5.35x | 5.08x | 34.1x | 28.3x |
| ManTech International Corporation | MANT | \$ 79.88 | 92.6% - 160.9% | 3,331.2 | 2,115.2 | 8.1% | 8.6% | 1.57x | 1.51x | 18.3x | 17.6x |
| Perficient, Inc. | PRFT | \$ 46.07 | 99.1% - 215.1% | 1,650.3 | 552.1 | 9.0% | 13.2% | 2.99x | 2.92x | 22.7x | 17.5x |
| Science Applications International Corporation | SAIC | \$ 87.02 | 94.1% - 142.9% | 7,126.1 | 6,031.0 | 4.4% | 8.5% | 1.18x | 1.11x | 14.0x | 13.4x |
| Unisys Corporation | UIS | \$ 11.86 | 78.2% - 185.6% | 1,137.0 | 2,968.1 | 2.0% | 8.5% | 0.38x | 0.39x | 4.5x | 2.5x |
| Virtusa Corporation | VRTU | \$ 45.33 | 79.5% - 141.7% | 1,727.8 | 1,289.8 | 9.6% | 8.0% | 1.34x | 1.32x | 16.7x | 14.7x |
| | | <i>Mean</i> | <i>86.4% - 163.3%</i> | <i>\$ 9,466.3</i> | <i>\$ 6,348.1</i> | <i>7.2%</i> | <i>12.1%</i> | <i>1.92x</i> | <i>1.85x</i> | <i>15.8x</i> | <i>14.0x</i> |
| | | <i>Median</i> | <i>92.6% - 160.9%</i> | <i>\$ 7,126.1</i> | <i>\$ 2,968.1</i> | <i>8.1%</i> | <i>9.4%</i> | <i>1.57x</i> | <i>1.51x</i> | <i>16.7x</i> | <i>14.7x</i> |
| Infrastructure Outsourcing | | | | | | | | | | | |
| Akamai Technologies, Inc. | AKAM | \$ 86.38 | 92.8% - 151.1% | \$ 14,601.9 | \$ 2,834.9 | 7.1% | 28.4% | 5.15x | 5.07x | 18.1x | 12.1x |
| Limelight Networks, Inc. | LLNW | \$ 4.08 | 86.4% - 185.5% | 491.1 | 184.5 | 12.9% | -2.5% | 2.66x | 2.45x | na | 28.1x |
| | | <i>Mean</i> | <i>89.6% - 168.3%</i> | <i>\$ 7,546.5</i> | <i>\$ 1,509.7</i> | <i>10.0%</i> | <i>12.9%</i> | <i>3.91x</i> | <i>3.76x</i> | <i>18.1x</i> | <i>20.1x</i> |
| | | <i>Median</i> | <i>89.6% - 168.3%</i> | <i>\$ 7,546.5</i> | <i>\$ 1,509.7</i> | <i>10.0%</i> | <i>12.9%</i> | <i>3.91x</i> | <i>3.76x</i> | <i>18.1x</i> | <i>20.1x</i> |

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|----------------------------|--------|-------------------|----------------|-------------|-------------|-------------|------------|----------------------|--------|-------------|--------|
| | | Closing Price | % of 52-week | Enterprise | Revenue | Rev. Growth | LTM EBITDA | EV / Revenue | | EV / EBITDA | |
| | | 31-Dec-19 | High-Low | Value | LTM | 2020 E | Margin | LTM | 2019 E | LTM | 2019 E |
| Solution Providers | | | | | | | | | | | |
| CDW Corporation | CDW | \$ 142.84 | 98.5% - 187.8% | \$ 24,326.2 | \$ 17,570.3 | 5.5% | 7.7% | 1.38x | 1.36x | 17.9x | 17.0x |
| ePlus inc. | PLUS | \$ 84.29 | 84.6% - 125.8% | 1,314.1 | 1,464.0 | 6.4% | 7.4% | 0.90x | 0.87x | 12.2x | 11.9x |
| Insight Enterprises, Inc. | NSIT | \$ 70.29 | 97.9% - 178.2% | 3,465.6 | 7,183.1 | 20.0% | 4.0% | 0.48x | 0.44x | 12.2x | 10.7x |
| PC Connection, Inc. | CNXN | \$ 49.66 | 94.3% - 168.6% | 1,224.1 | 2,812.9 | 3.7% | 4.4% | 0.44x | 0.43x | 9.9x | 9.8x |
| | | <i>Mean</i> | 93.8% - 165.1% | \$ 6,066.0 | \$ 6,237.5 | 8.9% | 5.2% | 0.64x | 0.78x | 10.4x | 12.3x |
| | | <i>Median</i> | 96.1% - 173.4% | \$ 1,314.1 | \$ 2,812.9 | 6.0% | 4.4% | 0.48x | 0.66x | 12.2x | 11.3x |
| Distribution | | | | | | | | | | | |
| Anixter International Inc. | AXE | \$ 92.10 | 98.0% - 175.2% | \$ 4,377.4 | \$ 8,712.4 | 3.3% | 4.9% | 0.50x | 0.50x | 10.2x | 9.6x |
| Arrow Electronics, Inc. | ARW | \$ 84.74 | 97.8% - 135.9% | 10,375.6 | 29,496.8 | -1.8% | 3.9% | 0.35x | 0.36x | 9.0x | 8.8x |
| Avnet, Inc. | AVT | \$ 42.44 | 86.6% - 122.8% | 5,754.4 | 19,058.7 | -6.1% | 3.7% | 0.30x | 0.31x | 8.1x | 9.1x |
| ScanSource, Inc. | SCSC | \$ 36.95 | 91.1% - 137.7% | 1,319.3 | 3,907.1 | -4.5% | 3.5% | 0.34x | 0.37x | 9.6x | 9.6x |
| SYNNEX Corporation | SNX | \$ 128.80 | 98.4% - 167.5% | 9,673.5 | 23,005.9 | 1.6% | 5.1% | 0.42x | 0.42x | 8.2x | 7.7x |
| Tech Data Corporation | TECD | \$ 143.60 | 98.9% - 179.3% | 5,766.6 | 37,082.1 | 2.0% | 2.0% | 0.16x | 0.16x | 7.9x | 7.2x |
| | | <i>Mean</i> | 95.1% - 153.1% | \$ 6,211.2 | \$ 20,210.5 | -0.9% | 3.9% | 0.34x | 0.35x | 8.8x | 8.7x |
| | | <i>Median</i> | 97.9% - 152.6% | \$ 5,760.5 | \$ 21,032.3 | -0.1% | 3.8% | 0.34x | 0.36x | 8.6x | 9.0x |

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